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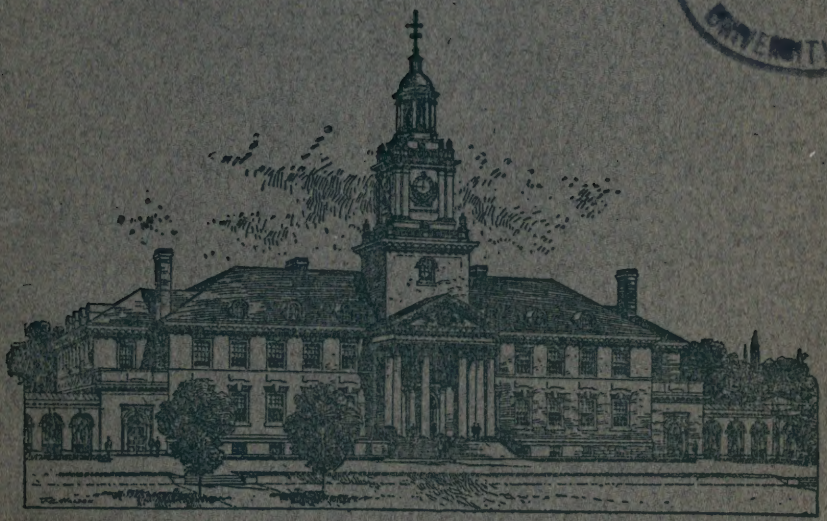

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The Johns Hopkins Alumni Magazine

VOL. X MARCH, 1922 NO. 3

THE WAR AS AN INTELLECTUAL UPHEAVAL[1]

BY ALFRED ZIMMERN

Formerly Fellow and Tutor of New College, Oxford, and Wilson Professor of International Politics in the University College of Wales

THE general subject of this course of lectures is "Problems of International Adjustment." I intend to speak today about the most difficult of all the adjustments that we have to make—the adjustment of our minds to the new external situation created by the war. The war is the biggest upheaval that has ever taken place in human history in so short a space of time. It has affected more individual lives and strained the social fabric more severely than any previous series of events; it has left us with a changed world in which pre-war landmarks have disappeared. And as men's minds always tend to move more slowly in the modern world than external circumstances, it is a primary duty for all of us to try to take our bearings as best we can in the new situation.

I wish to speak, therefore, not as an Englishman, or from our national point of view, but as an European, and, if I may say so, as a philosopher. I will divide what I have to say

[1] Lecture delivered at the Johns Hopkins University on December 19, 1921, on the George Huntington Williams Memorial Lectureship.

into four parts, dealing first with the strategic, then with the economic and the political changes brought about by the war, and finally devoting a few words to deeper considerations.

When the historian of the future sums up the strategy of the war, I think he will probably do so in a single phrase—the war was a siege of Europe. It was a contest like the Peloponnesian War in ancient Greece, between sea power and land power. Sea power was in a position to cut off the land power entrenched from the occupied area of France to Mesopotamia—one of the greatest land empires in human history—from the indispensable raw material without which modern industrial life and modern warfare cannot be carried on. It was said of the Crimean War that the victorious generals were named "January" and "February." The determining forces in this war were named "Cotton," "Wool," "Rubber," "Jute," "Copra," "Manganese," and a number of lesser mineral and vegetable products which you can identify by reference to any manual of economic geography. The modern world, insofar as it has become industrial, is an interdependent world, and the Germans realized too late, after Britain entered the war, that their power was inexorably limited by their inability to replenish their supplies of these necessary materials, drawn from the overseas world. You can read of this realization, and of the desperate attempts made to avert the inevitable collapse, in the three-volume history of the war by Herr Helfferich, the ablest civilian mind on the German side, and in a pamphlet in which Dr. Walter Rathenau, another far-sighted economic thinker, describes his efforts to organize the Raw Materials Department of the German War Office, established within five days after the British declaration of war. The meaning of the blockade, apparent to these men in August, 1914, was later brought home to every individual citizen and housekeeper in Germany; and this is the reason why, whatever may be said about a possible Russo-German combination, Germany is bound to gravitate towards a

Westward orientation. She will never risk a conflict with sea power again. The long struggle between the Easterners and the Westerners, between the advocates of Berlin-Bagdad and the advocates of overseas trading, has ended in a decisive victory for the latter.

What is the moral to be drawn from this experience for our post-war world? It is that sea power has now demonstrably become what Mahan in his writings predicted that it would be, or rather declared that it was, an offensive instrumentality. Before the war we regarded sea power as something operating on the water, and serving mainly for defense, or for occasional bombardments of coast towns. It was because sea power seemed so inoffensive, so much less damaging and provocative than the big apparatus of Prussian militarism, that the world regarded it with toleration. Britain was supreme at sea from the Battle of Trafalgar down to the American naval program of 1916, but as Britain did not abuse her sea power there seemed no particular danger in her predominance. But the revelation of what sea power really means, of its tremendous offensive potentialities, makes it increasingly difficult in the post-war world to justify naval predominance by any one power, be it Britain, America, or some other nation. The realization of this has caused a revolution, not yet always fully analysed, in our strategic thinking. The Germans, when they realized what sea power meant, cast about for remedies against what they called "Navalism," and propounded a theory of "Balance of Power at Sea." They were thinking characteristically in European terms, and it was not unnatural for Europeans to think of transferring to the ocean the system of uneasy equipoise by which Europe has been saved on four occasions, largely through Britain, from falling under the domination of any one military power. But America, who has been saved from our European rivalries and ambitions, who can contrast her Canadian frontier with the intrenched and fortified boundaries of potentially hostile European states, has found a better solution than balance; she has

put forward through the mouth of Mr. Hughes a product of *coöperation.*

For what is the logic of Mr. Hughes' naval proposal? It is that we should cease to think of navies as instruments of aggression or of competition, and learn to think of them as part of a coöperative agency for performing certain world services at sea. Mr. Hughes' proposals force us for the first time to ask ourselves the question: "What are navies for?"; and he answers it by suggesting that navies exist, firstly, for local defense; and secondly, for world service; and that naval power ought to be rationed out to each state in proportion to the extent of the local area to be defended, and of the world service to be undertaken. It is on some such unspoken calculation as this that the naval ratio agreed upon by the three naval powers has been drawn up.

Let us pursue this thought a little further. The moment navies are regarded as no longer competitive, but coöperative, logic leads irresistibly on to the idea of mutual guarantees of defense. Let me take a wholly non-contentious example—the navies of the Baltic. Let us assume Mr. Hughes rationing out to Sweden, Norway, Denmark, and Finland, the size of their fleets. What are we to reply to Norway if she complains that with her fleet thus rationed, at the dictates of a superior authority, she would be unable to face the combined attack by two or three of her neighbors? The answer can only be that, as she has been deprived by superior authority of her powers of self-defense, that same authority must in justice afford her a guarantee of security. Transfer the same situation to the Mediterranean, and you have the logic of one of the difficulties which the Washington Conference is at present endeavoring to overcome. The coöperative principle has been adopted for the Pacific, and it has been accompanied by the guarantee embodied in the new four-power treaty. The competitive principle still holds good in post-war Europe, where bitterness and hope of revenge are still active, and where no guarantees of security have been given either by Britain or America. The

European waters—the Mediterranean—form an intermediate region between the competitive and coöperative areas, for which no solution has yet been found. Let us hope that the logic of coöperation will prevail.

But a further thought suggests itself. If coöperation is established by navies, what are we to say of those materials which are indispensable to naval power, in particular, of the oil, that much contested fuel, without which the British and American navies, as they have now been fitted out, cannot be propelled? I know little in detail of the controversies surrounding this question except that they seem to have belied the old proverb about pouring oil on troubled waters. But it seems to me that if we would avert what is likely to be the greatest danger to the peace of the world of the coming generation, a conflict not over territorial boundaries, but over key commodities, we must accustom our minds to the thought of world control in some shape or other over materials indispensable to the life of civilization, and likely, if left free to the competition of private enterprise, to become the breeders of war. I will not attempt either to schedule these key commodities, or to suggest a means for controlling or conserving them. I would only throw out in passing the thought that without some such control, private interests, who were not inactive even in war time, may some day involve the world, even your country and my country, in serious conflict.

I pass to the economic situation. Europe, as you know, is distressed and impoverished, and its impoverishment is reacting upon employment, both in Britain and America. What is the cause of this impoverishment? You will be told that it is the treaty of Versailles. This is only to a very small extent the case. The real cause of the impoverishment of Europe is to be found in the character of the war, in the fact that the war was a siege. The war denuded Europe of its industrial raw material, of a large part of its productive power. There are, or were in 1914—I am quoting the figures of Mr. Hoover—a hundred million more

people than could be supported out of the natural resources of the continent. How did these people live? By producing manufactured articles and exporting them in exchange for raw materials and foodstuffs. During the siege, those imports and exports came to an end, and the central problem at the close of the war, as could easily be foreseen, and was foreseen, was the problem of the restocking of the blockaded area, of providing the peoples of Europe, irrespective of nationality, with the means of resuming their productive activities.

It was the cardinal blunder of the peace settlement that it did not face this over-riding economic need, and take steps to deal with it. The means for doing so were in existence. They were provided by the blockade machinery itself. The blockade began as a means for keeping things out of Germany and the enemy countries, but it was very soon discovered that to allow free imports into the neutral countries adjacent to Germany, into Holland, Norway, Sweden, and Switzerland, was equivalent to letting the goods go into Germany. There was, therefore, developed, as the war went on, an increasingly elaborate system of rationing the neutral countries, and this sytem was brought to such a pitch of perfection that a friend of mine sitting in an office in London had to decide so minute a question as to whether or not King Constantine, then living at Lucerne, could import a suit of clothes made from a London tailor, or must be compelled to wear clothes made in Switzerland. There was no insuperable difficulty in extending this sytem of rationing and control to the blockaded area, and plans had as a matter of fact been worked out for that purpose. They were not put into execution, and that for two reasons, which I am bound to mention. The first was the British General Election of November and December, 1918, in the course of which the British Premier was led into advocating policies wholly inconsistent with any ameliorating activities —an election which will remain a grave slur upon our British record, and was the immediate cause of the atmosphere at

Paris which rendered a clean settlement impossible. The second was President Wilson's message to Congress of December 2, 1918, which advocated the cessation of all control over commerce and industry, and made it impossible for the American representatives on the inter-allied economic frontiers in Europe to continue their activities.

Looking back upon the months between the armistice and the final signing of the peace, there were, I think, three grave mistakes, which aggravated the economic situation, already so grave owing to the character of the war.

The first was the omission of the Allied statesmen to take any active measures to deal with the economic condition of Europe. While they sat in Paris, drawing up the covenant and arranging territorial questions, the armies of what had been the Central Empires were being demobilized into countries which had little employment for industrial workers. No less than twelve governments, most of them working with improvised staffs, were attempting to deal with a desperate situation, and the hopes and aspirations held out to simple minds for the post-war world were being dissipated in disillusionment before the grim facts of the economic situation. It was not until February, 1919, that an economic organization—the Supreme Economic Council—was at length constituted, but with powers very much more limited than had been proposed by the Allied experts in November. In practice it became a purely relief organization, and although its work was necessary and carried on by a devoted staff, it helped to plunge Central Europe into that morass of charity and philanthrophy and consequent pauperization which has proved such a deterrent to private enterprise and investment, and from which all parts of the continent are still suffering at the present day.

The second mistake was the long delay in concluding peace. The Germans made a bad blunder in asking for an armistice instead of negotiating directly for peace, a blunder due to the insistence of Marshal Ludendorf, who, desiring to save the reputation of his army, persuaded the German

Chancellor to act against his own better judgment. The Allies made an equal blunder in deciding to conclude peace in one volume with each of the belligerents separately rather than to follow the procedure of 1814 and 1871, and make a preliminary peace with each before working out the details in a new series of documents at a separate session. The result of this mistake in procedure has been that the European Allies were not at peace with Germany, or free to trade with her without restriction, until January, 1920, while the American peace only dates from November, 1921, and the Allies are not at peace with Turkey yet. All the trouble in Mesopotamia, Asia Minor, and Syria is due to that single mistake in procedure. The Turks were allowed to forget that they had been defeated.

The third mistake brings me to the Treaty itself, so often regarded as the sole cause of the trouble. The Treaty is open to attack in two aspects.

In the first place, it left unsettled questions which it was vital to settle quickly. Almost any settlement of the Upper Silesian question would have been better than to have left it open for over two years. And the failure to fix the definite sum payable by Germany until May, 1921, has been an important cause in delaying Germany's recuperation, for she was put in the position of fearing that the better she ordered her finances the higher the bill would be put. But there are also definite violations of right in the Treaty—violations of the pre-armistice agreement of November 4, 1918, when the Allies, with certain reservations, accepted the fourteen points as the basis of peace upon which the Germans laid down their arms. The chief of these violations is the addition of pensions and separation allowances to the German indemnity. The formula agreed upon in the pre-armistice agreement was that the Germans should be liable only for compensation for damage done to the civilian population of the Allies and their property. It was the British who at the Peace Conference took the lead in trying to include war costs within the scope of this formula, and

it was General Smuts who by a sophisticated memorandum unworthy of his reputation, finally persuaded President Wilson, against the representations of his advisers, to accede to the admission of pensions and separation allowances, thereby nearly trebling the total German liability. Had these items been omitted, there is every reason to believe that the total liability would have been well within Germany's ability to pay, and that Europe would have been spared much of the disastrous controversy and unsettlement of the last three years. The simplest and most honourable way out of this imbroglio is for Britain, who initiated the blunder, to declare openly that she renounces all benefits accruing to her under these clauses, and to ask to have the liability re-assessed upon that basis. This simple step would at once ease both the German and the French situation. For France, instead of receiving, as she does now, only fifty-two percent of the sums paid by Germany to Britain's twenty-two per cent, would receive a very much higher proportion. The insertion of pensions was in fact simply a device to increase the proportion receivable by Britain and the Dominions, adopted at the cost of making the whole bill impossibly high. It is a policy unworthy of a Great Empire and should be revised.

What is the economic situation of Europe as a result of the character of the war and the nature of the settlement? Three features strike the eye.

Firstly, Europe, if I may coin a word, has been tempoarily de-industrialized. Those of her industries which are dependent upon over-seas raw material have been at great difficulty in re-starting, and some of them have not been restarted at all. How can Polish textile manufacturers, for instance, buy raw material in America at the present state of the Polish exchange? The result is that large populations in Europe have been reduced to unemployment and destitution, and that both Britain and America are feeling the loss of their producing power.

Secondly, there has been a change in the balance of power between the town and the country. If over-sea foodstuffs failed during the war, this naturally gave an advantage to producers of food within the blockaded area, and although every attempt was made to keep down food prices by fixing maxima, when the blockade grew severe and the well-to-do classes saw their children suffering, nothing could prevent illicit trading in milk, vegetables, bread, potatoes, and other necessaries of life. The result is that the rural population everywhere improved its economic situation. This is true not only of the blockaded area itself, but even of countries outside it, such as France and Ireland. Farmers paid off their mortgages, and grew independent of town bankers, and the end of the war saw them in a position to form powerful political parties. Moreover, in many parts of Europe land-owning classes were displaced as a consequence of political revolution, and the working peasants came into their own. The result has been to give peasant parties a powerful position over a large part of the continent, at the expense of the town workmen and their movements which had occupied so large a place on the political stage during the generations preceding the war. It will be one of the ironies of history that at the moment when Lenin and Trotzky, with doctrines adjusted to the needs and aspirations of town workmen, were hoping to paint Europe red, Europe should as a matter of fact have been turning green. These powerful peasant populations are not socialistic, they are strong advocates of private property and conservatively minded, but they will develop progressive and idealistic movements of their own in the direction, it may be expected, of coöperation rather than nationalism or socialism. We shall see, in fact, a type of progressive movement already familiar from the examples of Denmark and Ireland. It will be interesting to watch the attitude of the Roman Catholic Church, which has traditional authority among these populations, in this new situation.

A third phenomenon must be noted. There has been a revival of capitalism in Europe. In order to get its industries re-started, Europe has needed just that type of organizer or capitalistic entrepreneur, who was the *beau idéal* of the economic writers of the mid-nineteenth century. In fact, the classical economist and the familiar old law of supply and demand have come in better shape out of the war than the theories of the successive schools of reformers who had hoped to displace them. Men like Herr Stinnes and their like are more needed than ever in post-war Europe and they will no doubt be well paid for their services. No doubt much of the capital to be thus supplied will come from foreign countries, especially from Britain and America. And there is a danger here of economic penetration by rival groups of concession hunters against which the new governments will need to take stringent precautions. Europe has in fact temporarily relapsed almost into the condition of a backward economic area in danger of exploitation from abroad, but her democratic governments are pulling themselves together and gathering strength both to become masters in their own house, and to deal by taxation and otherwise with their own capitalists and captains of industry. We may expect to see the gradual emergence of a new progressive party, not socialistic in character—the socialistic organizations are already slowly decomposing or changing their character—based on the coöperation of various parties in the productive process in the performance of national service. In other words, we shall go back two generations or more behind the doctrine of Marx and his followers to the school of Mazzini and the mid-nineteenth century Liberals and Nationalists.

It is on the political side that the war can show most positive achievements. Three great Empires—Germany, Austro-Hungary, and the Russian—have disappeared and in their place we have Europe divided far more satisfactorily according to the desire of her peoples into a number of new States, including no less than seven new republics. The

great need of the moment is not to criticise and seek to revise these new frontiers where they have not been drawn in the most scientific possible manner, but to help the new countries with their improvized administrations in settling down and entering into peaceful and permanent relations with their neighbors. It is common to hear complaints in America of the number of new frontiers and consequent custom houses which impede intercourse in the old continent. But you cannot at one and the same time have self-determination and avoid custom houses. Fiscal freedom, the power to order your own system of taxation, is an essential part of political freedom. It is idle to hope, as Mr. Keynes and other writers have suggested, that you can refuse to Poland and Czecho-Slovakia sovereign rights which the British Empire in the heyday of free trade was unable to refuse to Canada and the other self-governing Dominions. But if, for the period immediately after the attainment of their freedom, these new States, particularly in the Danube area, were intent on emphasizing their new frontiers, and on deflecting old currents of trade into new channels, a contrary process has now already set in. Coöperation and mutual aid is becoming the order of the day. The Little Entente, composed of Czecho-Slovakia, Jugoslavia, and Roumania, and initiated by the wisest statesmen, not only in East Europe but in all Europe, President Masaryk and Premier Beneš, has done much to stabilize the situation and to enable the new countries to stand on their own feet and escape from the tutelage of London and Paris; and the recent conference of the Succession States at Porto Rosa has carried the same process a stage further. Those who talk of Free Trade Unions forcibly imposed, are unduly hastening a natural process of consolidation. Let them be warned by Pitt's experience of the Union of Ireland or by that of the Austro-Hungarian Monarchy itself. You cannot legislate for economic convenience when it runs counter to national feeling. Scotland and England remain a fiscal unit because national sentiment and economic con-

venience coincide; but Vienna has been torn asunder from Prague and Dublin from Belfast, after over a century of close communication in either case, because men, even in the twentieth century, are not mere economic calculations, and ardently desired what was plainly contrary to their convenience, and, on a narrow view, to their interest. It is difficult for Americans, with their broad unimpeded range from the Atlantic to the Pacific, to understand this, but it is vitally necessary that they should.

Hasty critics are constantly demanding that the Treaties should be re-written. They do not realize that a cumbrous diplomatic process would be involved and that unsettlement would be thereby caused. The Treaties are far from perfect; but their principal defects, which lie, as Mr. Keynes has shown, in their economic clauses, can be corrected without formal revision, either by the renunciation by governments of unjust claims or through the instrumentality of bodies, such as the Reparations Commission, armed with powers by the Treaties themselves. Similar means exist, on the political side, in the powers entrusted to the League of Nations for the protection of national minorities. No re-drawing of the map, however perfect, will eliminate minorities. The wise course is to protect their rights. The League of Nations has set to work on this task and it is beginning to wield a moral authority in Eastern Europe, which will grow in the course of years, especially if a financial leverage, through credit-schemes or otherwise, comes to be associated with it.

The League, in fact, is beginning to count in Europe. Its most important organ in my opinion, is not the Council or the Court—although there is an American judge, or the Assembly, but the Secretariat. Here you have, for the first time in history, an international Civil Service, a body of men who are, and feel themselves to be, servants of humanity. Their work is not sensational, and neither is it controversial. It is for the most part concerned with activities arising out of treaties concluded before 1914. For the Covenant central-

ized at Geneva most of the international bureaux existing previously to the war. There are also, of course, numerous duties, in Danzig, the Saar, etc., arising out of recent Treaties. It is in the Secretariat that America's abstention from the League is most felt; for administrative problems, questions such as health, transport, and so on, cannot be confined to one hemisphere, and, whatever may happen to the other organs of the League, no serious student of modern political problems can doubt that an international Civil Service, once created, has come to stay.

But "machinery is not enough." The world will not be saved by organization, whether located at Geneva or elsewhere. The change, if there is to be a change, must come from within; and there are signs that the lesson of the war is not unheeded. For the war is the greatest indictment which could conceivably be brought against our modern civilization. If, as all the further evidence confirms, Germany was its immediate instigator, the fact that it could happen at all, the moral atmosphere which made it possible, involve a criticism on our modern world as a whole. "War is war" was the motto of the militarism we have dethroned; but "business is business" is a watchword no more scrupulous or honourable. Wealth and power have been the gods of our industrial age, not of Germany only; and if the white race does not reverse its standards and attain to a measure of verity and harmony, its day of leadership will be over. No careful observer of present-day tendencies can doubt that the war has involved a loss of prestige and moral authority for the white peoples, irrespective of their share in the conflict, which it will take years to live down. Asia and Africa—not least Africa—have been watching the suicidal struggle, and we are already experiencing the first symptoms of their active comment.

Whither are we to look for a new movement of harmony and ennoblement? Whence will the new leadership spring? My faith is that it will be from Europe, from the war-scarred continent, whose national life has been so much

shaken by the war. Europe has over America one great, one inestimable advantage. We have come closer to the great realities of life. We have become, what you used to be, the pioneers in the great adventure of life and death. "Si jeunesse savait," says the old French proverb, "si vieillesse pouvait." The present generation of young Europeans, from Ireland to Russia, both *knows* and *can*. It has grown old in suffering and endurance; it is wise before its time. The fighting men, who waited upon death for months, often for years, are not yet in the seats of power. Survivals from the pre-war era still occupy the front benches. But in a few years their turn will come, and with it a new spirit, a bolder, cleaner outlook upon affairs. Suffering and sorrow make good men better and bad men worse, and I am optimist enough to believe that the former predominate. And common suffering, faced, if by men in opposing trenches, in a common spirit of sacrifice is a better means of reconciliation, and a truer bond of unity, than the appeals of those who have missed the great uniting experience and passed the war-years 'above the mêlée.'

Europe is a debtor continent. We owe ten millions, even billions. You need not fear that we shall not repay you. It may be a generation before the effort and anguish and aspiration of the last years are transmuted into the true gold of spiritual achievement, for there is much to recall and to ponder. But just as the great upheaval of the break-up of the Middle Ages, and the European revolution of the Napoleonic wars brought forth in due season fruits in abundance throughout the range of mankind's highest achievement, so my faith is that, after this, the greatest upheaval in its history, Europe, young Europe, will repay her creditors, not in dollars and cents only, but in the worthier and more enduring coinage of the spirit.

CLASSICS AND THE CLASSICAL WORLD

By E. G. SIHLER, Ph.D., 1878

Professor of the Latin Language and Literature, New York University

IT IS, as I write, a little more than forty-five years ago that we seated ourselves around Dr. Gildersleeve's seminar-table in that simple building on Howard Street, Baltimore. We could not then fully realize, as America now does, that just then and there academic standards and ideals were passing into a distinctly new and higher level; that there, on the Patapsco, on the veritable median line between the North and South of a reunited country, and on the very threshold of the second century of our National History, an institution was beginning its career, which, however plain its initial appearance, and unsustained by athletic shows and the glamour of juvenile traditional displays, was destined to be incisive and important. But there was nothing autochthonous about it. διαδιδόναι τὸ φῶς—it is a Platonic phrase; among us, too, there were the incentives and the enduring power of great exemplars, which came, more or less directly, from Europe—Boeckh, Immanuel Bekker, C. F. Hermann, Schneidewin, Ritschl, Mommsen, Kirchhoff, Droysen, Kiepert, Bonitz: these and similar classicists soon were with us, at least in the rapidly growing seminar-library, and frequent, sometimes daily, conferences with the Director gave direction and consistency to our reading. The Peabody Library in those early days furnished welcome and beneficent complement to our initial resources, where the librarian, Philip R. Uhler, admitted me to the alcoves, and I began to excerpt certain monographs of Greek scholarship published by the Berlin Academy. Dr. Lanman was a distinguished pupil of Whitney; Wheeler a recent student of W. W. Goodwin at Harvard, Savage an A.B. of Charlottesville; Walter Hines Page came, I believe, from Randolph-Macon, and I had not long before returned from Leipzig and Berlin.

A little more than eighteen years later, I was on a train going to Philadelphia in the winter of 1894–1895. The occasion was the special memorial meeting of the American Philological Association to be held there in memory of William Dwight Whitney. It happened that I found myself in the company of Hayes Ward, editor of the New York *Independent* and well known as an explorer of things cuneiform on the site of ancient Nineveh. He has been dead some years. "Three factors," said he, "have been preeminent in advancing, nay in creating, genuine university work in America: the life, work, and example of Alexander Agassiz, that of William Dwight Whitney, and the establishment of the Johns Hopkins University."

But to return to my main theme: At one time, in the winter of 1876–1877, Daniel Coit Gilman, in a little passage that connected the first library-room on the second floor of the original Hopkins Hall with the primeval stack-rooms behind, while sitting on a table and swinging his legs in that easy and *legêre* manner he often had,—there and then he stopped me with the question: "Mr. Sihler, how would you like to be 'Reader in Ancient History'"? Of course, of all things in the world, nothing would have pleased me more. But nothing came of it. Not long after this time, if I remember right, Baltimore and Ohio shares, in the general drift of national economics, fell heavily. No expansion in *my* direction. But it remained my higher—or deeper—avocation all the same, I am glad to say. We are apt to speak of the "*Olden Times;*" but really they are the Young Times, the vernal period of life, ideals, and outlook. And the substance of most felicity, so-called, consists in this, that we hold that things will be ever better and better with us. Twelve years of Drudgery lay before me. Fortunately, I knew it not.

The eminent Classicist, on whose Ninetieth Birthday I am writing these lines at this moment, had sat in the auditoria of Boeckh, Ritschl, C. F. Hermann. American Goettingen men were George Bancroft, Edward Everett,

Motley, Lane, Goodwin, Gildersleeve, names which need no garlands. The two among them, who ultimately became historians, are now enshrined in the American Hall of Fame, immediately below the Gould Memorial Library, where my seminar-room is, in which the most of my larger things have been worked out. *Beatae Arces;* on which a New York University man of 1920 has written these lines, noble lines, I think:

> Clasped in the granite arms
> Of a noble Colonnade,
> Where the souls of heroes nightly march,
> In a solemn cavalcade:
> Far above the drowsy Hudson
> High above the twinkling lights
> Of the City's restless millions,
> Peaceful lie these Blessed Heights.

In those far-away years, say, from 1872–79, I devoured, I read avidly, Grote, Mommsen, Curtius, Thirlwall; later, as I became older, pen in hand, came those two grand collections, Fischer and Fynes Clinton, then the Peters, especially Hermann, Wachsmuth, Leo, Arnold Schaefer. And I think these will, for a goodly time to come, furnish the *repertoria* for all those men who wish seriously to get their bearings in this wide domain. I of course in those vernal years looked up to men like Mommsen, Droysen, Curtius, and considered it felicity to see them, to hear them, and I wrote and wrote with devoted application. Let me quote from Macrobius: *Tum, cum admirabamur, nondum iudicabamus.*

As I grew older, saner, soberer, more self-determined, and, in short, more critical, gradually a metamorphosis came over my soul. I began more and more to ask myself: *is this the closest vision now possible?* For I do really crave as close a vision as possible. Can I really call myself acquainted with Classic History if I become a mere funnel of other men's judgments and convictions? Then, too, there came another slowly maturing conviction. It was this. Almost *all* the extant letters of the Greek and Roman world

have some historical value, even if they are not the utterance of professed historians. And Kirchhoff and Haupt and Bonitz had presented to my mind a mastery of letters which, even if it took a lifetime, I set myself to attain. For I had as an ideal, a goal which I now have steadfastly pursued for almost half a century, to gain as close a knowledge of ancient writers as life permitted; with as wide a range too, not merely of the professed historians, such as Herodotus, Thucydides, Xenophon, Polybius, Arrian, Curtius, Cato, Livy, Dionysius of Hal., Caesar, Sallust, Velleius, Tacitus, Suetonius, Plutarch, Appian, Dio Cassius, the *Scriptores Historiae Augustae*, Eusebius, and so down to Ammian and that stout old Hellene and old believer, Zosimus, and before him, Julian, and Julian's literary and cultural ideal, Libanius of Antioch,—but virtually all others also, for they all, or almost all, reflect the times in which they live, somehow. I will admit, there are some like Sophocles who seems to have that exquisite faculty of presenting human characters beyond race and time, and human vicissitudes of soul-struggles with a finished perfection and a typical truth and, in his choruses, to stir and give expression to those emotions and sympathies and reflections, which, in a different sphere, remind us of the puzzling felicity of typical perfection inherent in the art of Lysippus, or Praxiteles and many others. Whereas Euripides—with his curious urge of injecting the new dialectics and the new faculty of his day—the free playing of intelligence around every object, theme, or thesis whatsoever—a faculty which Matthew Arnold, somewhat naively attributes to "the Greek mind" in a universal and sweeping way—Euripides, I say, with his itch to περινοεῖν ἅπαντα is a child of, nay a moulding influence in, his own generation. Many of the plays of Aristophanes, much in Aristotle's περὶ Ποιητικῆς, and with a certain indirectness, the condemnation of Attic democracy in the greatest disciple of Socrates, Plato; all these are distinctly historical documents no less than the political speeches of the Attic orators, and Menander—

Terence mirrors the social decadence of Attic society in the most palpable way. Pindar exhibits the social consciousness of Hellenic aristocracy, while Aeschylus, the fighter of Marathon-times, presents the loftiest spirit of Greece, and a serious effort to endow the traditional Olympus with some measure of spiritual dignity. Greek "religion" is, of all the products of Greece, the least satisfactory. It is an institutional and topical something, with anniversaries bound up with legends of founders and their divine or semi-divine ancestry. Pausanias, the pious antiquarian of Greek eventide, exhibits the data of decay and the tenacious worship attached to *agalmata*, the most precious of which, even then the primeval ones, Xoana, were those carved out of hard wood. Olympia and Delphi, as he describes them, are curious reading. The *chronicon* of Eusebius tells us what gradual accumulation of contests there was, and what communities of Hellenic men succeeded there. I cannot say that this glamour of athletic rivalry appeals to me at all. I would give all of it for one conversation of Socrates. The Syrian Neo-Atticist, Lucian of Samosata, steeped all the culture of declining and decaying Greece in the *aqua fortis* of his Voltairian satire—like Mephistopheles, he is "der Geist, der stets verneint." To him the Christians in his *Peregrinus Proteus* are no less mere fools than the credulous folk who brought their money to Alexander of Abonuteichos. It is almost too obvious to say that Greek *thought* has given vastly more to the world than that hardfeatured changeling, Greek "*Religion.*" But where, in the weird cheapening of our modern and up-to-date American college, is there any place left for that serious and noble study, Greek philosophy? The collections of Mullach, of Ritter and Preller, or von Arnim's *Fragmenta Stoicorum*, are indeed in many libraries, but, to-day, they are mainly dead capital. I need not mention the concordance to Aristotle, on which Hermann Bonitz spent a quarter century of his life. It is a far cry from Thales to Iamblichus or his predecessor Porphyry of Tyre, the pupil and editor of Plotinus. Pophyry indeed is, in

a manner, the last of the philosophers. His defense of idol-worship, bound up as it were with a quasi-spiritual asceticism, made him, even after his death, the standardbearer of expiring paganism everywhere. The evidence is abundant in the Christian era, not merely of the last and greatest, the Diocletianic persecution, but even of the time when the Goths began to destroy the Roman empire, and when the foremost *ingenium* of that period, Augustine of Tagaste, the rhetor of Carthage, Rome and Milan, was deeply impressed with the theism of Plotinus, in his searching after God, in his pre-baptismal period. His *De Civitate Dei* is full of polemic against the tenets and theses of Porphyry. Also that same vast work of the later life of the Bishop of Hippo, his *De Civitate Dei*, is a review of Classic Antiquity, and the swan song of the Pagan world. I must here say a word on Edward Gibbon. His particular biographer, Leslie Stephen, calls him a Voltairian. It is a rigid tradition to call him perfect, I mean this, that it is a hopeless enterprise for any one, even to dream to re-write or to correct him. And still there is a very substantial element in Gibbon which we may call personal, individual or subjective. It has been observed from the first. It is the Deist's sneer at the Christian religion. Avidly he seizes on everything that may gratify this deeper trend of his soul. It is indeed a *Testimonium Animae.* As between the Old Believer Symmachus and the Bishop Ambrose of Milan, his undisguised admiration or sympathy goes to the former. And so of Marcus Aurelius, the Stoic upon the throne of the Caesars, blind to his miserable consort, weak in dealing with Verus or his wretched heir Commodus: I have excerpted his night thoughts with care and I am not inclined to lose my equipoise in the process. We think of Blandina, at Lyons, and of his confidant, the stiff pedant Fronto, who repeated the unspeakable atrocities foisted upon the Christians by the unvarying hatred of the pagan mob everywhere. Most people, in academic youth (in the main at second hand) absorb certain judgments which they carry into maturer life. One of the slow meta-

morphoses of my visions or views of ancient history was my emancipation from the Caesar-cult of Mommsen, whereas I have even now not changed in the slightest in my high regard for Ludwig Lange and Madvig. There is not the slightest trace of heroworship in my books on Caesar or Cicero, either. I am inclined to believe that most idealizations are bound up with considerable illusion, and, far from assuming the stern rôle of an Acacus, still the scholar's company are the Dead—with Southey he recites often:

> My days among the Dead are passed
> Around me I behold,
> Wherever my casual eyes are cast
> The mighty minds of old.
>
> *et quae sequuntur.*

Time was, when the Classics were rediscovered, a goodly time before the Osmanli ended things Byzantine on the Bosporus 1453. Humanists, Humanistic! Almost a slogan or battlecry here and there among us. I do not take the hierophants of Neohumanism nearly as seriously as they take themselves, while I grieve profoundly that in the mush and mediocrity of the recent American college, Greek has been pushed into a corner, to keep company with Sanscrit, and, like the Sleeping Beauty of Grimm's Fairy Tales, wait for the prince to penetrate into the tower surrounded with the giant brambles of popular "studies" so-called, and begin a new life. I am too old to see it or share in it. I gave two solid years of my life to the Humanists, from Petrarch to Erasmus. It was a fad, in great measure, of imitation or represtination of form, or versification, a power exotic or artificial in the main, though it helped much to establish once more the dignity and worth of personality as over against the postulates of group types and rigid formulas of mediaeval practice—Filelfo, Poggio, Politian—I know few lives and characters more intensely antipathetic to me than these.

As to Roman *ingenium*, I know few men who typify it so completely as the elder Cato and Varro of Reate. Utili-

tarian to the bone they both were, and nowhere will you meet this supreme characteristic of the Roman Latin so strikingly as in their treatises on Agriculture. A keen and uncanny sense for that which pays, a rigid exclusion of fads and frills you will find in both. And as to exploitation, the modern imperialists cannot excel them much, though they talk much of peaceful penetration, civilization and the white man's burden. A system of bureaucratic control, of elaborate and grinding taxation, was an essential element of the Roman "peace," which we are to admire, sometimes. As between *person* and *property*, the civil law of Rome very positively guarded the former much less, while the latter was hedged in with a multitude of the most acute and rigid provisions. They were, it is true, infinitely more decorous on the face of life, say until the fall of Carthage laid the Mediterranean world definitely at their feet. I do not undertake to say that, apart from a whole hearted adoption of Stoicism, their general culture was greatly benefited by the Hellenization beginning after Pydna 168 B. C. The Greek courtesans were in vogue, and much of the elegiac verse of Roman poets was spent on such, not to speak of worse things, for which there was a *lex Scantinia*—a dead letter in the Ciceronian age. Think of the Bathyllus of Maecenas, or of Hadrian's Antinous, worshipped in splendid temples and by regularly constituted sodalities throughout the Roman empire. The best influence, after all, was in education. And right here there is an element of perpetuity and continuity and endurance which not merely arrests the mind but almost touches the heart.

Grammaticus and *Rhetor* were the two professions which the Greeks developed, which they transmitted to the Romans, and which in great measure *we* have received from them. Gorgias of Sicily was one of the first noted rhetores, Augustine of Tagaste one of the last. When a child in elementary schools learns of "Parts of Speech," he and his teachers do not realize (of course) that that term (μέρη τοῦ λόγου) was used by Aristotle; that he, and later the Stoics

and the Alexandrine scholars slowly built up a system, devised a body of nomenclature now current all over the earth, which many of us somewhat superficially consider as elementary as dolls or marbles. Scaliger, Casaubon, Bentley, Porson, G. Hermann, Boeckh, Mommsen, and we, their heirs, are using terms, thinking in terms, operating in terms coined by the Greeks, and translated—sometimes in a very mechanical and wooden way—by the Romans. I must not be technical in this little paper, I know, but if the editor will kindly permit me, I would like to advert to the term *Accusative* case, whereas the Greek mother of that particular term meant the *effect* caused (*αἰτιατικὴ πτῶσις*) and so is, in that term, full of profound felicity. The Greek tense-term, for which *we* use the "imperfect" (the *παρατεταμένος χρόνος*) is vastly more significant and felicitous. It must make us, the craft of philologists, really humble or modest, at least, when we realize that Greek letters in their unexcelled history of quasi-organic production, were fairly made, done with and concluded, when grammar in our own narrow and modern sense, only began, viz., in that storehouse and laboratory and registration bureau of Hellenic culture, which we call Alexandria. Few words so automatically raise in the mind of the general reader and so vividly—the idea of hopeless aridity as the term of *Scholia*. But in a way, few things in that entire field of Classic tradition are so full of suggestion as the Scholia to Homer, especially those to the Iliad. We see what a world of erudition had clustered around, had attached itself, somehow to the father of Greek poetry. It is so convenient (and so impressive among the uninformed) to say that Homer was the "Greek Bible." Generalizations are most in favor with those who have no first-hand knowledge of their theme. Well, it *is* really interesting to see what affection and reverence did inject or interpret into Homer. Aristotle's valuations are familiar. But genuine micrology flourished at Alexandria, where copies of *all* scrolls were gathered, and every shred of letters found purchasers through the munificence of the Ptolemies.

There was Aristarchus, greatest of critics, his personal copies, preserved, of course, with scrupulous care; also his commentaries, or hypommemata, there the copy of his predecessor Aristophanes of Byzantium, there the edition of the radical and ultrasubjective critic, Zenodotos, Herodian the specialist on metre and accent. For these became absolutely necessary only when the world, hellenized by Alexander and his successors, learned that Greek as a nonnative tongue. A very great many of our scholia deal with controversial points of accent. (*Accentus* is a mechanical translation of *προσῳδία*.) It was in the eventide of the classical world when Porphyry came forward, the Neoplatonist, the champion of paganism and author of a great work against the Christians alluded to above. The personal ideals of the emperor Julian were largely derived from Homer. Now Porphyry, too, figures heavily in our scholia, and here and there we have more than a glimpse of his futile and nebulous efforts to maintain the Olympian figures. Servius on Vergil, some 130 years after Porphyry, furnishes a striking parallel: the Old Believers in Rome strove earnestly to endow the Aeneid, that basic book of Roman education, with a universality of content and significance at which we might smile, did we not know that in the generation of Symmachus and Praetextatus, the old aristocracy, like all old aristocracies, in their clinging to the past, in their scorn for the gospel, in their impotent scanning of the Gothic horizon, died hard.

THE SEXTANT

By CAROL WIGHT, M.A., 1921

Bring me my sextant, Arthur; 'tis true, I am almost blind,
But clapping my eye to its mirror calls dead days back to my mind.
Once more to the ocean's horizon I pull the sun down through the glass,
And my life's last observation is, Arthur, you're just an ass,—
An ass to quarrel with Lizzie. Now listen and when I'm done,
You can damn your uncle as much as you like,—my voyage is almost run.
Yes, years ago when New Bedford sent forth two hundred sail,—
And it wasn't in quest of codfish—for a man harpoons a whale,—
I signed first mate on the *Crisis*, she lay in the stream out there,
'Twas the day I was going to be married,—do you mark me?—to Margaret Blair.
She smiles on the wall up yonder, the substance I cast away
And have lived with a painted shadow just sixty years today.
Jealousy same as yours. She'd had dozens o' beaus through life,
But I swore she must drop them all astern or she never could be my wife.
Down Elm Street she came to meet me on the arm of Rufus King,
Her face just a burst o' sunshine, both laughing like everything.
I glared as he grinned and left us, and I told her,—my wife-to-be,—
She'd best stow her ballast better to weather life's voyage with me.
One sharp word led to another as steel leads men to slay.
Till I told her to go to the devil and left her and sailed away.
Five years I cruised the ocean wherever a whale is found,
From the ice of the arctic circle to the South Pacific ground.
Then we'd make for the Sandwich Islands when our casks were filled with oil,
And when that was unladen to sea again in quest of the greasy spoil.
I was captain by then of the *Crisis*. Home held no lure for me
When I thought of the woman I'd turned adrift, so I cursed and stuck to the sea.
But sail where I would o'er the ocean, one face rebuked me yet,
For the hearts that have wronged remember, when the hearts that are wronged forget.
'Twas along the last of September days. We were off Kamchatka's coast,
When we sighted a sail as morning broke, so close we could hail her most.

Her helm untended. No sign of life. Thus much the glass descried.
So I lowered a boat, and the crew pulled hard till I mounted the stranger's side.
Holystoned by the wind and wave her decks were as gray as bone,
Like the thirst-cracked lips of a dying wretch her painted woodwork shone.
To starboard and port by turns she swung and her rudder groaned behind,
Like a pilotless soul on the sea of life she drifted before the wind.
Caught in the ice till Death's grim work was done and then set free?
This was her story? Perhaps,—who knows the secrets of the sea?
But surely the chill of death it was that greeted us down below,
Where a frozen hand with frozen ink wrote rolling to and fro
As the vessel rolled, and a woman's form in the cold white bunk bent o'er
The form of a child and my heart stood still,—I had seen that face before.
Blue was the mould on the ice-cold brow, but I knew that yellow hair,
For the wistful face that gazed on the babe was the face of Margaret Blair.
I turned, and there in the looking-glass, as the vessel gave a swing,
The sad, mad face that greeted mine was the face of Rufus King,
As with frozen fingers and frozen ink forever doomed to write,
He gazed with frozen eyes at the page of the Log of the *Northern Light*.
Then one by one my comrades stole aloft,—no words were said,
For they knew and they left me there alone to make my peace with the dead.
I gazed at the child that might have been mine, at the woman my lips had cursed,
Still holding the babe to her heart of ice to warm it while it nursed.
Then I read o'er his shoulder the jumbled Log: "I dismissed the crew today.
But Margaret is much too weak to move. We stay till the ice gives way.
It must all come right, our voyage, in the end. I know the Lord will spare
The noblest woman He ever made,—my helpmate, Margaret Blair.
'Twas storm today. The fire went out. She said as she closer crept:
'No cold can chill your love and mine.' Then she looked at our baby and wept.
No matches. The crew have taken all. No fire. No flint. I'll pour

Some gin in the ink so it will not freeze, for it thickens more and more,—
But cold can't reach her heart. That burns with a love so warm and true,—
And what am I, I, Rufus King, to be, Margaret, loved by you?
By you, the queen of New Bedford; yes, what other girls could hold
A candle to you? Ah, God, let me warm you, you look so cold
As I see your face in the looking-glass. Cheer up, we've broken ground,
And the pawl won't click till we pass Clark's Point, for at last we're homeward bound.
What's ice and snow to a Yankee heart? New Bedford fires burn bright
To welcome us home with our oil and bone and our good ship *Northern Light*."
So ran the Log of the luckless craft, and my eyes grew dim and blurred
While the wind through her hawse pipes sobbed amain and no other sound I heard.
All hatred and bitter thoughts I crushed as I gazed at the dead man there
And thought of the mind that stove and sank on the reef of its own despair.
Then I started to hear my faltering voice, yes, felt that the Lord was nigh,
As it cried: "God guard you, Rufus King, you're a nobler man than I.
And wherever men toil on the ocean the winds and waves shall tell
Of my shame and the fame of Rufus King who lived and died so well."
I turned for I could not face the dead I had cursed and cast aside,
For I felt it was she and her lover that had lived and I and my hate that had died.
There was something so sacred about the place that I thought as the dead I viewed,
It was theirs and God's alone, not mine; what right had I to intrude?
The salvage? Could I for the money's sake rob Margaret's open grave?
Better bury her there where the seagull's prayer re-echoed the dirge of the wave.
I fetched me a bit from the carpenter's chest and bored that vessel's plank
At the water-line, and the sea sucked in and she reeled and heeled and sank.
So we stood on our deck with uncovered heads as the swirling wave closed o'er

The grave of the good ship *Northern Light* and the priceless freight
she bore.
And I followed in thought her downward course with a heavy and
contrite heart
As I pricked the spot where she sank with a cross,—you can see it
there on the chart.
For fifty years in storm and calm, ashore and on the sea,
Her picture,—I fetched it from off that wreck,—has helped and
guided me.
It has cheered my course year after year, and if ever I swung astray,
It has interceded with God for me and showed me the better way.
So make your peace with Lizzie, my lad; should a man that's a man
be vexed
With a girl that outweighs the whole wide world and can pilot him
into the next?
Quarrels— you'd better forget 'em. There's so much work to do,
That pounding along on the sea of life the best of us just pull through.
Is it land or fog on the starboard bow? Make ready the riding light;
Here, take my sextant,—I'm bound aloft. We shall anchor in port
tonight.

THIRTY THOUSAND MILES IN CHINA[1]

By CHARLES KEYSER EDMUNDS, '97, Ph.D., 1903

President of Canton Christian College and Observer-in-Charge Magnetic Survey of China, Carnegie Institution of Washington, 1906–1917

COMING to China fourteen years ago, after several years of experience as a physicist in the field as well as in the laboratory and classroom in America, I naturally desired to exercise the same dual functions in China. Urged by the Editor, I presume to recite some aspects of such field work as the interims in my increasing scholastic duties and absences in America have allowed.

Among the many problems which China faces today, some of the most pressing are of a physical nature, such as reforestation, control of rivers and canals to prevent floods, construction of railways, development of mines, and many others of a similar sort. In connection with the surveys which are necessary in any comprehensive or co-ordinated development along these lines, it is highly desirable that the magnetic field of the earth be known as accurately as possible throughout the country. For it is with the aid of the compass that the most rapid and economical surveys can be made. Hence the proper corrections to apply to compass and dip needle pointings on land are of value to surveyors and railroad and mining engineers, just as they are to the mariner for sea areas.

As the reputed inventors of the compass for use on both land and sea, it is quite appropriate that the Chinese, after a long period of arrested development along such lines, should have the assistance of scientists from the West in securing as soon as possible an accurate knowledge of the magnetic elements throughout their territory in which these

[1] From *The Journal of the North China Branch of the Royal Asiatic Society*, vol. l, 1919.

physical developments are being inaugurated and throughout the adjacent seas on which so many Chinese risk their lives.

Besides these practical applications, a detailed knowledge of the earth's magnetic field is essential for any adequate conception of the cause or causes of such magnetism, and for the solution of this large problem data must be had for all parts of the globe both on land and sea.

Therefore, when in 1904 "The Department of Research in Terrestrial Magnetism" was created by the Carnegie Institution of Washington with the special object of securing magnetic data in the regions of the globe where most needed and where no organizations are prepared to undertake this work, I was glad to offer my services to the Director, Dr. L. A. Bauer, for such work in China as he might authorize and support.

Already some observations had been made by the Observatories at Hongkong and Zikawei, by various naval officers at coast and river ports, and by an occasional party of travellers from abroad; but nothing like an adequate or comprehensive survey had been thought of.

Thanks to the liberal support accorded by the Carnegie Institution of Washington, and to the aid given by the Hongkong and Zikawei Observatories in the loan of instruments for the first few years, by the Chinese Government through its customs and postal services and local civil officials generally, and to the co-operation of consuls and missionaries wherever encountered, as well as to the courtesy of the Canton Christian College in granting furloughs, it has been possible to carry to a successful conclusion not only the whole programme for a preliminary reconnaissance of China proper but to extend the survey into Manchuria, Mongolia, Chinese Turkestan, French-Indo-China and Siam, and to do so practically "on time," in spite of the fact that the period of our work has been one of almost constant political unrest in China.

From the first, care has been taken to avoid giving the Chinese any impression that we are intending to invade their

field, but only to encourage and assist them in the accomplishment of the preliminary stages of a work which, when their government is sufficiently organized to maintain a scientific service on its own account, will properly fall under their meteorological department. With this end in view I have always included in my party a Chinese student to act as recorder and assistant observer.

In French-Indo-China and Siam, the hearty co-operation of the respective Governments was accorded and free transportation provided for the expeditions.

The results secured in the period 1905–13 have been published by the Carnegie Institution of Washington with similar observations in other parts of Asia and of the globe under the title "*Land Magnetic Observations*" in Volumes I and II of Publication No. 175, by L. A. Bauer, Director of the Department of Terrestrial Magnetism. A third volume is in course of preparation.

At each station astronomical observations of the sun, usually by means of a theodolite, are made so as to determine the latitude and longitude of the station, and the azimuth or true bearing of some distant fixed mark as seen from the station. Elevation above sea level is determined by hypsometer or aneroid barometers. Standard mean time is given by a battery of watches and chronometers very carefully carried. With a magnetometer the magnetic declination or deviation of the compass from the true or astronomic north is determined and also the intensity of the earth's magnetic force at that place, while with a dip circle the dip or inclination of the magnetic needle in the vertical plane is observed. These three elements—declination, dip, and intensity—give a full knowledge of the earth's magnetic force at that place both as to its magnitude and its direction for the time when the observations were made. But the case is greatly complicated by the fact that both the direction and the magnitude of the earth's force at a given place undergo cyclical changes throughout the day, with monthly and secular variations superposed. It becomes then a difficult task to

ascertain the precise correction to apply to any given compass reading in order to ascertain the true bearing at the time of observation. Continuous records of these changes in the earth's field must be secured at as many permanent stations as possible, while at a large number of well distributed points throughout the intervening territory detailed observations must be made and repeated from time to time, so that both the absolute values and the rate of change may be determined. The only station in China where continuous records are being secured is at Lukiapang, under the Zikawei Observatory, itself an integral part of the missionary establishment of the French Catholic Church.

The extensive observations already made throughout the world, both on land and sea, under the auspices of the Carnegie Institution of Washington will, when combined with the results of surveys maintained by the various governments, give the first comprehensive magnetic survey of the globe and thus afford the basis of a much more intelligent solution of the problems of terrestrial magnetism than has hitherto been possible. Any more detailed reference would be out of place here; but it is a cause for congratulation that China has been included in the areas studied even ahead of the time when her own government will be able to undertake such work and thus contribute her just share as a full-fledged modern nation to the solution of a world problem.

In this magnetic survey of China and adjacent territories some 65,300 miles have been travelled not counting transoceanic voyages. Eliminating duplications, for some of the routes have been traversed more than once, gives 43,240 miles as the total of our lines, not counting 2600 miles in India by my colleagues D. C. Sowers and C. G. Fuson who journeyed from Peking to Bombay by way of Kansu, Chinese Turkestan, Kashgar and the Karakorum Pass. My assistant, Mr. Frederick Brown, has traversed Mongolia in two directions and has done Kweichow, besides filling gaps in other provinces. The total number of stations where observations have been made (not counting repeats) is 394 plus 63

occupied by Sowers and Fuson within Chinese Dominions. The average interval between stations is about 60 miles, varying from 15 to 150 miles according to circumstances. Average cost per station has been about U. S. $50, not counting observer's salary.

My own share of travel has been a total of 45,500 miles, of which about 12,000 have been in repetition, so that irrespective of duplication my single routes amount to about 33,500 of which 3500 have been in Indo-China and 30,000 in China. In Siam I have gone only where railways could carry me, but in French-Indo-China I have traversed every province, while in China proper and Manchuria I have traversed every province except Kansu (the S. E. corner of which I have just entered) and Kweichow, and have skirted the real physical boundary of Inner Mongolia and of the Szechwan-Tibetan borderland.

Naturally a great mass of data has been collected, especially with reference to the physical features of China, and I cherish the hope that some day the pressure of my college work will lessen sufficiently to permit the preparation of a comprehensive volume. For the present I must content myself with only a brief outline of the field that has been covered, with some indication of the most striking features.

THE RULE OF FIVE

According to ancient custom most ideas in China come in fives. One might substitute "fünf" for "drei" in the German saying and apply it to Cathay. Life consists in the five relationships: between sovereign and subject, husband and wife, parent and child, brother and brother, friend and friend. There are five classes of society, five orders of nobility, five rites, five degrees of mourning, the five-clawed dragon (which doesn't exist) and the so-called five-coloured porcelain (which isn't five-coloured!). There are the five elements: metal, wood, water, fire, earth; though the all surrounding air is omitted! There are the five senses, the five virtues, the five planets, five colours, five musical notes

and the five classics, the learning of which by a cast-iron method has in several hundred years wasted enough energy for ten millenniums of true education. There are the five races, the five cereals, the five seasons and of special value to the traveller the five points of the compass: North, East, South, West and *Center;* indicating that it is just as important to know where you *are* as it is to get your *direction!* Hence even under the risk of being considered too artificial, I shall present my subject according to the ancient rule of five.

The *five corners of my own area* of travel are significant in their contrast.

In the southeast Hainan, the Island of Palms; in the northeast Dolonnor and the Salt Marshes of Inner Mongolia; in the northwest the Snow Mountains of Sungpan Pass, the Switzerland of China; and in the southwest the jungles of Laos and Siam, and in China proper, the elevated lakes of Yunnan.

My separate expeditions might be characterized as follows: (1) Along the China Coast from end to end; (2) Overland from Peking to Canton *via* Hankow, Changsha, Kweilin and Wuchow; (3) The Yangtsze Kiang from Tibetan Borderland to the sea; (4) The Yellow River's Middle Course; (5) Over the Meiling from Canton to Kiukiang; (6) Across Shantung, China's Holy Land; (7) A Loop in Inner Mongolia, *via* Hannor Pass, Dolonnor, and Jehol; (8) From Canton to Mandalay, but stopped half way by a Revolution; (9) Partout en Indo-Chine; (10) China's Far West, Shensi, Kansu and Szechwan.

These journeys have taken me to the *five Sacred Mountains* of China: Taishan in Shantung, Hengshan in Hunan, Wutaishan in Shansi, Omeishan in Szechwan and Hwashan in Shensi. Of these Omei is the highest (10,000 feet) and affords the greatest variety of scenery, Hwashan (6000) presents the most interesting ascent because of the steepness of the artificial way prepared for devotees, while Taishan (5000) has the most valuable historical connection with

China's Chief Sage, Confucius, who ascended this mount about 500 B.C. Each bears numerous temples and each is visited annually by thousands of pilgrims from far and near. The lastnamed is now very accessible even for the tourist since the Pukow-Tientsin railway passes through Taian which lies at its base.

The *five great engineering feats* of the Chinese have been seen.

1. *The Great Wall,* begun as early as 240 B.C. and added to as late as A.D. 1547, to keep out invaders who nevertheless have made an effective entry, has been followed for long distances in widely separated sections of its tortuous course of 1250 miles.

2. *The Grand Canal,* the oldest and longest artificial waterway in the world, built in three sections in three different periods (from 550 B.C. to A.D. 1283) and finally completed for the inland transport of grain from Hangchow in the South to the Capital in the North, has been traversed practically from end to end of its 1000 miles, in spite of the dilapidated condition of its northern section.

3. *The Hangchow Bore Wall,* built about A.D. 915 and still protecting millions from a twice-daily flood from the sea, has, though less known, impressed me as worthy of a greater share of fame than the Grand Canal or the Great Wall, because of the dynamic difficulties to be overcome in the construction of 180 miles of a wall which so effectively shuts out one of the most gigantic and powerful tidal bores in the world.

4. The exceedingly clever and extensive *irrigation system of Kwanhsien,* inaugurated probably about 200 B.C. and still responsible for so much of the prosperity of Szechwan, has been investigated from the headwaters of the Min that feeds it to the by-canals of the Chengtu plain where it supports millions on what would otherwise be barren land.

5. *The Brine wells of Tzeliutsing* also in Szechwan, sunk *by hand* to a depth of 3000 feet and operated by crude machinery with water-buffalo as the motive power, have been

seen and marvelled at. Dating, as some of the wells do, from as early as A.D. 250, this region still supplies an enormous quantity of that most essential commodity, which in China is the Government's one monopoly, salt, which under the recent administration of Sir Richard Dane has added so greatly to the nation's revenue.

Note, please, three significant characteristics of these engineering feats: Each is of fairly ancient origin; each is of great magnitude; and each is a work of utility, all but one (i.e., the Great Wall) being of important use today. Contrast these with the useless monuments which the ancient Egyptians have left as marks of their former prowess and you will readily admit the superiority of the Chinese. Remember too that the Chinese are the only great nation to-day that has survived from any remote past.

Remember that before Abraham left Ur of the Chaldees, China's system of education began, which with a revision in A.D. 627 continued until 1905 to drill all the scholars and statesmen of the realm in a system of ethics the cardinal principle of which is filial piety, and then compare their history with the promise contained in the Hebrew decalogue which says "Honor thy father and thy mother, that thy days may be long in the land which the Lord thy God giveth thee," and I, for one, believe that you have noted at least one of the reasons for the survival of the Chinese people.

Five Imperial Burial Grounds have been visited. Near Peking in three different directions are three such areas: The Ming Tombs near *Nankow*, much visited by tourists and possessing the finest setting of any of the imperial graves by reason of a great amphitheatre of mountains; the *Tungling* or Eastern tombs at Malanyu, east and slightly north of Peking by cart, where the *late Empress Dowager* lies buried behind a series of ornate buildings with most gorgeous roofs of yellow glazed porcelain; and the *Shihling* or Western Tombs to which one may journey practically all the way by rail *via* Kaopeitien on the Peking-Hankow line. Here the *last Emperor* lies buried. At both the Eastern and the

Western tombs there are immense groves of cypress in the midst of which stand the shrines.

At *Nanking* are the tombs of the Southern Mings with a mile of huge stone figures flanking the avenue of approach just as at Nankow in the north.

In Southern Shensi and Western Honan are the enormous but simple mounds of earth which mark the resting places of the *Hans and the Tangs*. These and the two Ming burying grounds are of Chinese kings, while the Eastern and the Western tombs are of Manchu monarchs. All are truly imperial in their conception and dimensions.

Nor can we forget our pilgrimage to the birth and burial place of Confucius, at Kufu, in the ancient Kingdom of Lu (now the province of Shantung), where the 75th lineal descendant of the Sage so worthily bears today the title of Duke, and cares for the graves of his ancestor marked by a stone bearing the simple yet majestic inscription "Most Holy Ancient Teacher."

There are *five principal* kinds of highways in China, just as elsewhere in the world; though up till now the relative importance of certain ones is much greater in China than in most other countries: Waterways, footpaths, pack trails, cart roads, and railways. Roughly speaking China is a country of no good roads. The chief reasons are not far to seek. In the great delta regions of the West and Yangtsze Rivers, in the best sections of the Great Plain and in Szechwan land is so valuable for cultivation that as little as possible is spared for highways. Then, too, these are the very regions where the population is so dense and labor so cheap that most transport on land is by human bearers who need only a footpath. And finally the frequency of waterways on which the cheapness of transport in boats of all sizes controls the situation for both short and long hauls even upstream.

THE FIVE RIVERS OF FIRST IMPORTANCE

Waterways both natural and artificial are tremendously used wherever available and China for the most part is well supplied. Of rivers one thinks first of the mighty Yangtsze, a veritable aorta of trade that traverses the entire width of China proper from Tibet to the sea, and is navigable for ocean going vessels for 600 miles, by smaller steamers for 400 more and by still smaller steamers for another stretch of 400 miles, while junks of fair size can proceed still another 100 miles or so. The navigation beyond the first 1000 miles is, however, quite precarious.

We think secondly of the Si Kiang or West River and its tributaries in South China. Rising in Yunnan this stream is a great river by the time it reaches the Kwangsi-Kwangtung border. Marked in its upper and middle courses by fine gorges and in its lower course by a magnificently fertile delta, it is navigable for coasting vessels as far as Canton and for smaller steamers as far as Wuchow while launches ascend the higher courses of its tributaries as well as of the main stream for another 150 miles or so and smaller craft go clear to the Western boundary of Kwangsi and to the Northern boundary of Kwangtung. This river system is second in importance only to that of the Yangtsze from an economic point of view.

Next in importance is the Han, which joins the Yangtsze at Hankow. This rises on the Shensi-Szechwan boundary. It is navigated by small steamers as far as Siangyang a distance of 300 miles, and during summer by cargo boats and houseboats and by smaller craft in all seasons up to Hanchung 600 miles further. In its course across Shensi it traverses abrupt gorges and its bed is rock-stream. It becomes readily navigable only at Laohokow where it widens rapidly to a width of 2600 feet. Further down it again narrows and at its mouth is but 200 feet wide in low-water season. In this lower part of its course, it has the peculiar feature enjoyed also by the Yellow River, of a bed higher than the adjoining plain, so that embankments are necessary.

During the summer the water-level of the Han rises 20 feet, sometimes more, above the adjacent plain.

Of the Yellow River one can hardly speak as of a highway; for the most part it is useless except as a means of drainage and irrigation, and is one of the most unmanageable rivers in the world. In length it is but little inferior to the Yangtsze, being 2500 miles.

Rising in Tibet it is already a stream 200 yards wide when it enters northwestern Kansu, where its bed is 8000 feet above sea level from which it drops 5000 feet in its northeasterly passage across the province. From Kansu the Yellow River runs north to the high land of Mongolia where its course is changed to almost due east. At Hokow the river turns sharply to the south and continues in that direction for about 480 miles until it is joined near Tungkwan by the River Wei and turns again sharply to the east.

The Wei rises in Eastern Kansu and flows southeastly to Shensi, and crosses that province in a nearly straight line from west to east. Its well-watered valley was the birthplace of Chinese civilization and is full of relics of the past. It has also the reputation of being the most fertile land in China. About nine miles from the river on its right bank, and half-way across the province, stands the great city of Sian.

At the Tungkwan bend the bed of the Yellow River is still 1300 feet above sea level. At the Sanmen rapids, which no boat can ascend, the river again enters the hills, to leave them finally at Mengching, a place above Menghsien, in Honan, about 200 miles below Tungkwan. Here the great river, running from four to six miles an hour, finds itself on the level plain, with still 400 miles to go before it can reach the sea.

This is where it is most to be dreaded, because the mud and sand carried down by its stream have actually raised the bed of the river until it is several yards above the level of the surrounding country. Consequently there are few important towns on its banks. At its crossing with the Grand Canal its bed is 16 feet above the level of the Canal.

During the whole known historical period this river has frequently changed its course for the last 350 miles. These changes have swept over a fan-shaped area of 60 degrees in one of the most densely populated and highly cultivated regions in all China, and have consequently caused great loss of life both directly by flood, and indirectly by consequent famine through destruction of standing crops as well as of stored food supplies. This has earned for it the title of "China's Great Sorrow."

To hinder its overflowing embankments hem it in, some nearer, others farther, ranging one behind another at variable distances. In this manner, if one gives way, another prevents the inundation. In their present state, these works are still very inefficient, the dikes being weak and constructed with materials that offer insufficient resistance.

Nowhere throughout its length is the Yellow River navigable without difficulty. Its highest reaches are rock strewn and only rafts can be used with any degree of safety. In the long southward reach between Shansi and Shensi navigation in crude boats can be accomplished downstream but only with considerable difficulty owing to the many rapids, and at one point navigation is completely interrupted by the young Niagra of Lungwang or Dragon King, 250 miles below Paote. Above the falls the river is about 200 yards wide, and the channel is broken up by rocky ledges. The bulk of the water, a tumbling mass of a coffee colour, flecked with foam, plunges into a narrow crack in its bed near the Shensi shore. The depth of the fall is about 60 feet, but the bottom is a seething caldron which cannot properly be seen owing to the clouds of spray that rise from it. The remainder of the water falls into the same fissure at right angles to the main fall in a series of cascades 500 yards long. There is a spot some distance below the fall where, standing on the roadway by the river-bank and looking upstream, one sees a cloud of mist rising from the middle of the water without apparent cause, while at one's feet the whole volume of a great river rushes for three miles down a narrow canyon in places not more than 15 yards, and nowhere more than 40 yards wide.

A day's journey below the falls is the famous Lungmen gorge, ending in the straits of Yumenkow. This gorge is about 10 miles long. The river is a deep, still stream 150 yards wide, and races between precipices of reddish-grey sandstone 800 feet high. Above the precipices the cone-shaped tops of the hills covered with green scrub rise for another 800 feet. At Yumenkow the banks contract to 50 yards, and upon each side of the strait there is a fine temple. Coming downstream, when one's boat rushes through this strait there is a striking transformation, the river suddenly leaving the hills and spreading out over a sandy flat to a breadth of three miles.

At Yumenkow coal brought by mulepack from the mines of Southern Shansi is loaded on so-called "Honan" barges, curiously bedecked with bells, which carry their cargoes to Tungkwan and also up the Wei.

In its lower reaches the Yellow River is really navigable only in two stretches: to the north of Honan and in the last 25 miles of its course. But even in these parts shoals prevent boats except of very light draft from passing.

The control of the Yellow River is to-day one of the most pressing of China's physical problems. Experience has shown that the diking of such rivers is insufficient and almost futile. Captain William Tyler, coast inspector of the Chinese light house service, has presented a report on the Yellow River published by the Inspectorate-General of Customs at Shanghai in 1906, in which he proposes to control the river's lower reaches by providing for the depositing of the silt by deliberate flooding of large areas along the river, that is, to regulate its floods.

Of the *Grand Canal* we have already spoken. In the great delta regions natural and artificial waterways are as frequent as the cross roads in an American country.

In the south the highways are mere "single-file" footpaths on the tops of low ridges between cultivated fields. In some sections these are paved with stone slabs. The only native carts I have seen south of the Yangtsze are the

low slung ox-carts in the southern part of the Island of Hainan and the high hung ox-carts of mid Hunan, and of these the chief part is their "squeak." In the Yangtsze basin, Central China, and especially Shantung, wheelbarrows are used both for passengers and for goods; and some of these affairs are veritable "ships o' the land." In some sections of the Chengtu plain in Szechwan smaller one-passenger low slung barrows were encountered and used, though the sedan-chair is the "palace car" here as in most parts of China. In these regions the roads are generally wider than in the south, but hardly any better.

In the north generally, both east and west, carts are much used. Village and city streets as well as roads are hence of a better width than in the south. Throughout mountainous regions pack animals, usually mules or donkeys, are used, though in some regions human carriers alone can negotiate their way. While across the desert regions camels are the monarchs of the road.

In some regions, as in the loess country, the roads have become deep ruts worn below the general level of the land to a depth of 10, 20, 30 and even 70 feet! And these in the dry season are dusty beyond description and in rainy weather are deep in mud of a peculiar stickiness.

Along with the development of railways China needs improved roads everywhere.

There are, as might be expected, *five sorts of native transport;* some of these (though few of them could be called transports of delight!) I have used extensively, as follows:

I. Boats: junks, houseboats, triple-deck passage boats, canoes, slipper boats, footpower boats (2 kinds: rotary and direct), sampans, cargo boats and rafts, engine-driven, rowed, towed, yulowed, sailed and poled. In many provinces.

II. Carts: closed and open, narrow (3 feet, 6 inches) and wide (6 feet, 8 inches), drawn by one, two or three animals (not counting the driver!) and always springless. In North China especially.

III. Wheelbarrows: single platform, double-sided, small wheeled, large wheeled, pushed by man, pulled by man or donkey or both, sometimes aided with a sail. In Central and North China. Avoided by me as much as possible.

IV. Bipeds: men and women, with loads carried on the back, across the shoulder at the two ends of a balanced rod, or between two carriers using one pole or two parallel poles. Sedan chair, two, three or four bearers; mountain chair, two, three or four. In every province.

V. Quadrupeds: Horses, mules, donkeys, oxen, cows, camels and yak; with or without pack saddles, but for riding purposes *always* with a foreign saddle. Used for riding, pack or draft or for carrying a chair or litter slung between two animals. In Northern and Western China.

During the travel by cart, mulepack or carriers I have for the most part gone myself on foot, partly from preference and partly to insure a more gentle transport of the chronometers in my belt or hand.

One of the most remarkable developments in the way of more rapid transportation in China has been the installation of so-called "launch trains," especially in the middle and lower sections of the Grand Canal and throughout the Canton delta. For instance, in the custom house at Canton hundreds of steam launches are registered as towing between it and neighbouring cities and villages, and anywhere distant from 10 to 100 miles. These launch-towed craft are exceedingly well patronized both for passengers and for freight. Launch building ship-yards have been rapidly developed in Shanghai, Canton and elsewhere. But, for the more rapid and adequate development of that class of communication upon which so much depends for the binding together of China, we must look to the railways.

RAILWAYS IN CHINA

Railroads and other ways of transportation of commodities are related to the life of a nation in pretty much the same fashion as the circulatory or blood system of the human

body is related to the life of the individual; and similarly the lines of electric transmission of intelligence and the postal lines correspond pretty closely to the nervous system whose functioning is so intimately a part of our bodily life. Each of these systems, the circulatory and the nervous, has a dominating centre which has a relationship of mutual dependence with all parts of the body and all functions of its life. No part can live alone. So the development of a national life in China depends necessarily largely upon the development of these two systems within her borders, the one for the easy, cheap and rapid distribution of commodities, so that the people of one region may readily relieve the hunger or want in another region, and the other for the quick and effective transmission of intelligence which will cause the thrill of the new national life to be felt in the remotest parts and by every individual.

In a study of the present development of railways in China several features at once impress themselves upon us. First, most of the lines already in operation serve the north-eastern quarter of China; the great trunk lines that will connect the far west with the seaboard and the north with the south have yet to be completed. Second, very little has been accomplished or is even projected under purely native auspices; and third in arranging for the financing and construction of these arteries of trade on the basis of concessions to foreign capitalists China has become involved in a complicated five-fold international web which is without parallel elsewhere in the world. In this allotment (present and future) of so-called "spheres," or more correctly "strips" of influence, the associated French, Russian and Belgian interests have a predominating share, followed by Japanese and by British in close rivalry, while German interests are small. American interests were almost nil until increased by concessions to the American International Corporation through the Siems-Carey Company to some of which considerable opposition has been offered from other quarters. The lines to be built with American capital and by American

engineers are widely separated and total about 1600 miles, supplemented by concessions as to priority in certain other regions for which the lines are, however, not yet defined.

For China's sake it is to be hoped that this co-operation in railway building will be properly fostered.

The lines now in operation or contracted for will serve to join the capital to at least nineteen out of the twenty-one provincial capitals and to the great sea-ports of both the Northern and the Southern coasts. At present nine of the provincial capitals are connected with Peking by rail.

After the War in Europe ends there will surely be a revival of activity in China on the part of the various concessionaries, and a great development of trade.

FIVE EXPERIENCES ON THE ROAD IN CHINA

One incident will illustrate the difficulty of getting in China reliable information as to the nature of the road even from those who live nearby. On the afternoon of September 22, 1915, we made an early halt for the night on account of a heavy rain. We were told by the innkeeper that we were within easy reach of Jehol, that the road was free from any hills worth mentioning and that by starting at dawn we should reach Jehol by sunset. Instead of this, however, noon of September 23 found us on the ascent of a steep pass, the road bed consisting of great slabs of smooth rock up which it was impossible for the horses to pull the carts as they were. After feeding both the animals and the men and emptying the carts, we had to hitch the four horses to one empty cart and with all hands pushing and all mouths yelling we managed to get the carts over and then down on the other side of the pass, and after carrying the equipment and stores, box by box, over the pass and reloading the carts at the bottom we were able to proceed after four hours of very hard work. We then expected to make Jehol by 10 p.m.; instead, that hour found us again on the slope of another such pass, only steeper than before. Fortunately there was a good moon and by repeating the process of the afternoon we at last got over

this barrier to easy travel and made Jehol at one on the morning of September 24, having been twenty- one hours on the go, and we had not been off the main highway, said to be a good *cart* road!

On a certain day in Western Chihli two connected incidents illustrating how wary the traveller must be in making bargains for his transport would have greatly amused us if they had not caused such delay in our progress. The first was that although we had the day before bargained for an open cart with three mules and a closed cart with two, and had made the man state definitely that only *big mules* would be supplied, when in the morning the vehicles arrived, the first was drawn by two cows and the second by a single small-sized mule, and yet the price agreed on was demanded! Evidently the carter did not realize that we were experienced travellers in China and could not be thus played with. Still it required more than an hour of argument and even threats of official punishment before suitable animals were brought and even then we had to be content with one less than the total number bargained for, but we had the satisfaction of withholding a dollar at the end of the day's journey.

The second was that on reaching the small village at the foot of the mountains where pack-mules were to be engaged to carry our equipment to Yingchow in Shansi, the young muleteer with whom our advance agent from the inn at Liangkochwang had begun negotiations, shouted out in front of a whole crowd of onlookers that the price would be seven dollars (Chinese Currency) a day per mule! Now the ordinary price for which a native could hire them would be about 70 cents. We therefore could only laugh at his offer, as did all the bystanders. His ridiculous claim being thus publicly made he could not accept any reasonable offer from us without great loss of face. I had finally to seek out the headman of the village, invite him to our inn to have tea, and get him to talk the whole matter over with the muleteer who finally under pressure accepted my original offer of one dollar per mule per travelling day and 40 cents per mule

per day of halt. Having thus "overcome" him at the very start he and his associate muleteers proved to be the best set we have ever employed, in spite of their initial intention to swindle us. To the headman of the village we presented a tin of salmon, with great ceremony on our part and great appreciation on his! Thus ended a half-day devoted to the "diplomacy" of the road in China.

In 1907 before the building of the Tientsin-Pukow Railway we journeyed by cart from Tsinan the capital of Shantung to Tsining on the Great Canal and at Taian on the way ascended the Sacred Taishan. Evidently the day of leisure which our carters had enjoyed while we visited the Holy Mountain had been too much for them and had spoiled their sweet dispositions, for the next morning, when we expressed our desire that they should proceed southward as agreed, they refused unless they were paid more money. They had already been paid a half of the full bargain and had not yet proceeded half way on the journey. They would not listen to reason and became violent, locking up the inn and attempting to prevent our exit. However, we produced our passport, which we handed to the keeper of the inn and asked him to convey our compliments to the nearest magistrate and request his presence to settle the dispute. We finally went to the magistrate ourselves with the paper and after some parley with the officials secured reprimand for the carters, but were forced to agree to the payment of another allotment on the contract. This was a mistake, as was afterward proved, for it only made the carters that much worse.

The magistrate furnished us a supposed military guard of two men to see that the carters behaved themselves during the rest of the journey, but as a matter of fact, this guard was of very little use and was nearly quite as bad as the carters themselves. The carters would not start early in the morning, sometimes not before 8 or 10 o'clock, and then would wish to stop for the day at 4 or 5 p.m. and not proceed any further, in spite of the fact that they were being paid more than double the proper rate. Matters went from

bad to worse on this section of the trip, until finally when we knew that we were within one day's march of another magistrate, we secured the soldiers' acknowledgment that they were in charge of the expedition and charging them to take care of our things, we hastened on on foot, covering some 25 miles by two in the afternoon.

We laid our complaint before the magistrate and were very courteously received. We were utterly exhausted by our rapid march and evidently our looks bore witness to this fact. For without any preliminary enquiries or warning, the servants began bringing in plateload after plateload of fried eggs and bowl after bowl of tea. We did more than justice to this simple but ample fare. I'm sure that I ate between ten and twenty eggs and drank at least six bowls of tea! Between bites and sips we explained our plight. A deputy on horseback was sent to secure the carters and bring them in and they were questioned separately and then severely reprimanded and lightly beaten. They were not allowed any further pay and we were advised to take carrying coolies from this point on, which we did, and in a forced march of twenty-four hours we reached Tsining on the Grand Canal. Here, through the magistrate, we hired another team, this time of two mules in tandem, which guaranteed to make the trip to Kufu, the birth and burial place of Confucius, in three days for a price way below what we had been paying the previous carters.

In February, 1916, we reached Lungan in Northern Szechwan and desiring to cross the Snow Pass to Sungpan we found that it would be impracticable to take our pack-mules over this route because of its elevation and the narrowness of the trail which in many places is cut out of the face of a rock wall. So my student-assistant, Ip, and I accompanied by one coolie to carry a minimum of cooking gear and food, together with four others to carry the observing tent and instruments and our two cots and blankets, proposed to negotiate the pass and from Sungpan to descend the Min to Mochow where we would be joined by our mules which in the

charge of our cook would travel first south and then west over easier roads while we went first west and then south. All went well with us in spite of our ascent to 13,000 feet in the middle of February. I had anticipated a trying time because each of the two parties who to my knowledge had in recent years traversed this route had reported that the wind and cold and snow on the pass were quite severe in May and in August when they had crossed. To our surprise we found it much easier and, whereas these narrators had said that a few minutes on the pass "sufficed" for them (some members of one party even succumbing and later dying from the effects of their experience in this crossing to Sungpan), we spent a half day and a night just a little way below the summit on the Eastern slope to make magnetic observations and the next morning stopped for half an hour on the actual summit to determine its altitude. These more favorable conditions were doubtless due to the fact that the precipitation and the wind are both less in mid-winter than in summer at this altitude.

But though we fared well in getting over the pass and in descending the Min as far as Mochow, there our troubles began; for there we had expected to meet our mules and also to replenish our purse and our larder from a remittance through the Chinese post, but on arrival we found no mules, no money, no mail and no missionary, though one was "stationed" there. He, we found, had left ten days before on account of the disturbed state of the region. We had just enough money to pay for transport to Weichow the next place where a missionary was stationed, and stopping but one day for observations we pressed on. Arriving at Weichow we could get no word of our mules though they were now according to original schedule some five days overdue. When we were heartily welcomed by Rev. J. H. Edgar, the pioneer missionary of Batang, we made bold to suggest that a little loan would be a help as we had just paid out our last coin to the coolies and didn't know where our mule-caravan was; he said, curiously enough, that he was just on the point of asking

a loan of us! He and his colleague were anxious about the state of the region and had been discussing which of them should go to Chengtu and return with funds sufficient to enable them to take their families to the capital for safety. Having heard of my approach they had waited thinking that I might have extra money and here I had arrived in distress myself! It was very evident, however, that much less money would be required to get me and my small party and light equipment to Chengtu than to transport two whole families and their gear. So they managed to put thirty dollars at my disposal and I undertook on reaching Chengtu to send back to them three hundred.

Mr. Edgar in his wholehearted manner accompanied us some ten *li* on the road and directed us where to look for the castles of the independent Tibetan lord high up on a bluff on the opposite bank of the stream. We had journeyed only an hour or two after he left us, when we met coming northward our long-lost mules which should have been travelling southward. The cook's arm was in a sling and with much weeping he related how the caravan five days before had been attacked by a large number of armed bandits (50 he said; ex-soldiers of Szechwan, I suspect) at about nine in the morning at a point some 15 *li* north of Mienchuhsien where two small houses stood, one on either side of the road. As the caravan came opposite the farther end of these houses the bandits without warning opened fire and began by killing one of the military escort of eight who were accompanying our train of mules, and who had no chance to put up a defence. Two of them were taken prisoners and have never been heard of since, while the other five with the cook and the four muleteers made good their escape, the cook injuring his arm badly in falling from his perch on top of a pack saddle. From a safe distance our men watched the robbers and later returned to gather up the fragments that remained! Every box had been smashed in with stones and the contents of all thrown out. All money, various small articles of value (such as my safety razor, cuff-links, etc.), and

all Chinese clothing were taken, but none of the foreign style clothes of Ip and myself. All my records of observations for several months back were thrown out, but thanks to the diligence of the cook and the muleteers on their return to the scene of the encounter every sheet was recovered though many were crumpled and muddy. You can imagine how anxious and even ill I felt until I reached Chengtu and had an opportunity to go carefully over everything and how relieved I was to find no essential sheet of observation missing! I did, however, lose the photographic negatives of a month's taking and one of the chronometers, which since it needed repairing had been discarded and was to be returned to Washington from Chengtu. All the other instruments, fortunately, were with me on the more western road. It has been suggested that if I had been with my caravan probably it would not have been attacked, as foreigners, in recent years at any rate, have very rarely been subject to attack in Szechwan, and that my caravan was probably taken for that of a Chinese. I do not know what credence to give to this idea.

After gathering up what the bandits had left, the cook and muleteers reported the incident to the magistrate at Mienchuhsien who immediately sent out a posse of two hundred to hunt for the robbers. He also ordered the roadside houses to be razed on the principle that their tenants were responsible to know what sort of characters congregated there, even if they were not actually in league with the band. The magistrate made a complete inventory of all that was left, forwarding one copy to the Commissioner of Foreign Affairs at Chengtu and one to me. He also furnished sufficient funds to feed the mules and men as far as the next magistracy where again money to carry the caravan to the next place on their way to join me was given.

We made an early halt for the night on the day that I met the mules, and on going hastily through the boxes I found things in such a state that about two or three entire boxloads had to be thrown away as debris, and the cook and

"crew" had to be supplied with an entire new outfit of blankets and bed-skins and extra clothing as they had been left only what was on their backs.

When we reached Kwanhsien in the late afternoon of February 29, we found the city in a state of siege and it was only after considerable difficulty and long waiting that we managed the next morning to get to the China Inland Mission in the suburb for assistance and advice. It was rumored that a band of 1800 ex-soldiers were threatening the city for its loot. As soon as our observations were finished and we had inspected the irrigation works at Kwanhsien as the best we could under circumstances we hastened on to Chengtu. Arriving there in the mid-afternoon we were forced to wait hours at the city gate. Finally we were allowed to enter and found a hearty welcome from the foreigners residing there, especially from Postal Commissioner Doodha and his staff, the French and British Consul-Generals, and the Faculty of the West China Union University.

All of these were exceedingly helpful in their respective ways. The University folk made me feel entirely at home and on their campus I established my observing station. Mr. Doodha had heard of the attack through Chinese sources and had at once sent word to the post-offices in that region to render me every possible aid in case I turned up in their district and had even on his own initiative sent fifty dollars in notes to the office where I was most likely to apply, so that I might have money to come on with. Mr. Smith, His British Majesty's Consul-General, counselled me regarding the representations to be made to the Chinese authorities, not with any view of claiming indemnity but of spurring them on to more active measures for the suppression of such bands in the interests of all good citizens, foreigners and Chinese alike. The Commissioner of Foreign Affairs, who by the way had been educated in Berlin and spoke German but not English, promised to take such steps as were possible to capture the culprits and to recover the property, but I felt

that the proposition was hopeless and have not been surprised that no result has followed.

Szechwan unfortunately has been in a very disturbed state, even at the capital itself, for the last year and a half and still is in some respects in several districts. This is due not only to the maraudings of discontented soldiers turned bandits, but also to the conflicting political aims of several military leaders within Szechwan itself and also from Yunnan who have been attempting to gain supremacy in this fairest of the provinces. Meanwhile the people suffer.

It would be very erroneous to infer, however, that there, off the beaten track in China, travel is entirely made up of incidents like those just recorded. While many if not most innkeepers and professional roadmen, such as carters, muleteers, etc., are ready to "do" the unwary traveller and to impose on him in every way, still I have found many exceptions to this spirit even among these classes, and from the peasant folk *per se* I have never received any but the kindest and most helpful treatment, being furnished food and shelter and guidance (for raiment I always preferred to rely on my own "stock"—for obvious reasons) not only on reasonable terms but often with most positive refusal to accept any compensation. Off the beaten track especially the native hospitality is most hearty and sincere, tinged only with an element of curiosity concerning the ways and things of the foreigner, which is only natural under the circumstances.

My first real experience with this element of curiosity was on the west coast of the Island of Hainan. When observing near Hiongpo, I had erected as is usual for magnetic work a small tent to shield my instruments from the sun. A great crowd gathered to watch and it proved utterly impossible to keep them from pressing as close to the tent on all sides as they could. Careful inspection showed that none carried any iron articles or implements and the only trouble came from their constant chatter, because during part of the observations I had to listen to the tick of the box chronometer placed some feet away and carry the tick in my head while

my eye was at the telescope pointed on the oscillating magnet. The unexpected and strident noises which proceed from a Chinese crowd do not aid one in such observations! Some idea of the numbers present and of their chief or at least secondary occupation while watching me may be had from the fact that next morning having need to return to the same spot I had no difficulty whatever in locating my station, for in the midst of a great field all covered with the refuse of *chewed* sugar-cane there was a bare spot eight feet square that marked where my tent had stood.

For the most part we lived in the regular inns when on the main roads, though when not on a trade route and inns were not available we often spent the night in the open during warm weather and during wet or cold weather sought shelter in some lone hut or cave-dwelling or if in a village applied to some friendly shop-keeper or house-holder for space to spread our cots and cook our meals. While often we had to search for such accommodation this was usually only because anything like a suitable space was hard to find, not that the people were unwilling to aid us. In most cases in fact, where we had to rely on the goodwill of a householder and not on that of a regular innkeeper, our entrance necessitated a shift of a considerable part of his household or of his goods, and taking everything into consideration the hospitality afforded us was more than could reasonably be expected.

But in some regions, especially in Northern Shansi, and Northern Shensi also, we encountered a peculiar and disagreeable anti-foreign attitude on the part of many innkeepers even in the larger towns. Generally when approaching a town or village in which we intended to stop for the night I would let the cook go on so as to arrive well ahead of us and have time to select and secure a proper place. Several times it happened that even though his patronage had been eagerly solicited by rival innkeepers and there was evidently no lack of room, and he had definitely engaged his choice, when I appeared and the innkeepers saw that I was a

foreigner, a fact which the cook had been careful not to reveal, we were flatly refused admittance and often had the outer doors locked against us with an utter refusal to treat with us at all. In such cases we would seek out the Christian Chapel if there were one and hope for better treatment at the hands of the caretaker, or if a mission chapel were not available which was more often the case, we would seek the assistance of the highest official in the town or of the headman in a village. But even under official pressure it was difficult to gain an entrance to an inn in some of the towns of northern Shansi and Shensi and sometimes it was 10 p.m. before we secured a resting place though our caravan had arrived hours before. On the other hand in some places we were readily accommodated even on arriving late in the night.

One difficulty encountered frequently throughout Shensi and Szechwan during the winter of 1915 and the Spring of 1916 was the prevalence of large numbers of soldiers not only along the main routes but often also in out of the way places. Since they were not in camps, but were quartered on the villages and towns, inn-space and even house or shop-space available for us was difficult to find and under such circumstances we secured accommodation only by applying to the officer in command who always did what he could for us, even moving a small company of soldiers to make room for us, but as a rule the individuals so dislodged were not over friendly. The ranks of the Chinese army as a rule are not composed of the very best material.

THE OUTLOOK

Doubtless there will be within a reasonably short period tremendous development of railways in China and they in turn will have a tremendous welding effect upon the country. It is necessary that within her borders there should be developed well equipped technical schools in which the Chinese may be taught the arts and sciences necessary for the construction and maintenance of railways and other works.

There is hardly space to refer in detail to the development of the postal system or telegraph lines in China, except to point out the tremendous success with which the postal system has been developed in that full-fledged post offices with the various departments are in operation all over the country and at lower rates than in Europe and America.

Telegraph lines connect all provincial capitals with Peking and this sytem is being extended. It is not thoroughly understood as yet by all the people just how these things work and I am reminded of two instances which have come under my own observation to illustrate this.

An old man in Shantung hearing of the function of the line of wire that ran across his fields declared that men who could devise such a method for the transmission of intelligence could do anything; whereupon one of his neighbors remarked that he did not think much of it, for he himself had sat for two weeks watching that line very closely and had not yet seen anything go by.

The other instance was of Hunan carrying coolies tossing their worn out straw sandals on the telegraph lines to secure for themselves a fleetness of foot equal to the speed of the electric message.

The telegraph and the postal system have already, in combination with the development of the public press in China, done a great deal toward unifying the people and may confidently be counted on for a much larger effect in the future, and this combined with more adequate railway facilities will surely foster a greater feeling of nationhood and of closeness of relationship between the various provinces.

We have seen something of the various physical problems which China faces. It is significant that the greatest physical feat of the ancient Chinese, the Great Wall, which was executed to shut out foreign intruders, has been broken down in all essential respects, and China is today fairly ready for foreign assistance in solving her problems, if it be friendly and not predatory.

The solution of China's physical problems largely depends on education; the education of the people to furnish the background of general enlightenment and the education of the native leaders upon whom must rest the responsibility for carrying out in detail such plans as may be formed for the alleviation of the conditions I have referred to. In order to determine just what remedial methods should be followed, there should be first a thorough study of present conditions by the best consulting engineers and scientists who can be secured. There is at the present time, it seems to me, a most important function for foreign experts to fill in connection with the development of China, and their work is a necessary preliminary and hence it is all important that China seek and use the assistance of such men, although it is also true that her need for such assistance will be temporary, and the application of the remedies, which they in their wisdom suggest after a study of the field, will still depend upon native talent.

The new national flag of China embodies, I believe, some significant lessons in the present connection. The sewing together of five stripes of silk to form one flag is easy, but to make a united nation of five peoples so widely separated, linguistically and geographically, in a country so greatly accidented by mountains, and so harassed by flood and famine, and so lacking the ways of quick transport and general modern education which must precede the development of resources and of ways of communication, requiring native captains of industry and native leaders of all sorts—a very much greater task. It is just here that one of the functions of our mission colleges in China comes in—to train these leaders *in situ*, without loss of connection with China; for they need to know China as well as Western science and institutions and methods. They need to be qualified and unselfish, then the five points of the compass assumed by the Chinese may be rightly adopted—for the north, east, south and west will then all be centered around the common pole of service to China, and from the provinces to Peking and

from Peking to the most distant provinces, the people will be united in an efficient, peaceful and helpful state, at least within the boundaries left them by their at present more powerful and predatory neighbours.

China is destined to become one of the foremost producing nations of the world, a vast market, a hugh stabilizing, peaceful power if allowed to develop her great wealth in her own way. The problem of China is a world problem, culturally as well as commercially.

The issue in the Orient is sharply drawn: Independent national development for China, and continued progress of the other free Asiatic states; or the subjection of China, and the endangering of all free nationality in Asia.

The loss of free nationality in Asia would probably be a calamity to mankind. However justly the occidental may pride himself on his mastery of the art of living, however truly he may rejoice in his achievement throughout the whole reach of life, a sane modesty, taught him by his own science, should keep him from regarding Western peoples as the whole race of man, or from looking with scorn upon entire divisions of the race, whom his training has not fitted him to appreciate.

A proper reverence for humanity will not allow him to exalt his own position at the expense of the entire East, or to attempt crudely to force upon a whole continent external domination or those forms of civilization which are the product in some part of himself.

From the higher level of human development, expansion and domination we may well feel that the world is destined to profit greatly by events in the Far East if they result in restoring to humanity the whole Continent of Asia, free to join in making the history of the next hundred years, free to be itself and to supplement, with all of good there is manifest or dormant in it, the strength and goodness of the West.

The shortest road to a partial success in this endeavor to preserve free nationality in Asia is the development of China's material resources, which will not only enrich China

and the world, but will help to arouse the people from their age-long sleep; and it may be that military development consequent upon this awakening will serve to maintain the nation's independence.

But China's independence should concern her friends in the West chiefly because such independence is essential to something far more important: true freedom for the Chinese people.

The dormant powers now awakening in this race and promising such a future for it in the commercial and political affairs of the world demand imperatively that there be set in motion, side by side with this material transformation, forces far more subtle that shall bring about a true renaissance of the nation by influencing profoundly the intellect and the soul of the race. Only so can the Chinese people be speedily restored to the modern world.

THE UNIVERSITY

Professor H. S. Jennings attended the meetings of the American Association for the Advancement of Science and Associated Societies at Toronto during the Christmas holidays, and read a paper on "Variation Occurring in Uniparental Reproduction" before the American Society of Naturalists in the Symposium on the Origin of Variations. Professor Jennings was elected president of the new national organization of geneticists, formed by a union of sections from the American Society of Zoologists and the Botanical Society of America. He was also elected a member of the National Research Council from the American Society of Zoologists.

President-emeritus Remsen addressed the Biological Journal Club on December eighth. Centering his remarks on the conditions for work and research at the University of Tuebingen in the early seventies, at which time he held a post there as assistant in Chemistry, he gave a most interesting review of the surroundings, manners, and customs of the university, and spoke particularly of his association and acquaintance with Professor Hugo von Mohl, the great plant physiologist.

Dr. G. L. Streeter, of the Carnegie Laboratory of Embryology, addressed the Biological Journal Club on January nineteenth, giving an account of his experimental work on the development of the ear. On February tenth, Dr. E. F. Phillips, in charge of bee investigations for the United States Government, spoke before the Journal Club on his work on the relation of soils to the production of honey by bees.

Professor L. J. Henderson, of Harvard University, addressed the Zoological Seminary and Journal Club on February eleventh on "The Physical Chemistry of the Blood and the Principles of General Physiology."

The Naturalists' Field Club has continued its activities during the present year, devoting its energies to general

natural history observations and to the distribution, migration, and conservation of birds. The following trips have been taken: October 15, Timonium Ant Hills; October 29, Homewood for Bird Study; November 12, Druid Hill Park for the Study of Salmon Hatching at the Maryland Conservation Commission Hatchery; November 28, Sherwood Forest for Study of Fish and Oyster Bars; December 24, Christmas Bird Survey of Homewood and Guilford; February 20, Crow Roost. The following meetings have been held with the following papers: October 13, "Instinct" by Dr. J. G. Edwards; November 8, "A Rare Central American Bird" by Professor E. A. Andrews; "A Homewood Chipmunk" by Miss Inez Coldwell; "Winter Birds at Homewood" by H. T. Folger; "Observations on Fish" by J. M. LeCato; "Habits of Bees" by A. Shaftesbury; February 20, "Submarine Rambles on Tropical Reefs" by Professor Longley, of Goucher College.

During the summer of 1921 Dr. R. P. Cowles and Dr. A. Schwitalla carried on an investigation of the streams and ponds on the Homewood grounds, studying with special attention the factors which determine the occurrence of a green scum, Euglena, on the largest pond. Data were collected concerning temperatures, carbon dioxide content, and acidity of the water at frequent intervals and at twelve stations throughout twenty-four hours. This work will be continued during the summer of 1922.

Professor K. Dunlap has been elected president of the American Psychological Association.

Dr. Buford Johnson attended the annual meeting of the American Psychological Association and presented a paper at the meeting.

At the annual meeting of the Archaeological Institute of America, held at Ann Arbor during the Christmas holidays, Professor D. M. Robinson was elected general secretary.

Professor Robinson gave an illustrated lecture at the Museum of the University of Pennsylvania in Philadelphia on February twenty-fifth on "Caricature in Ancient Art."

On January nineteenth he read a paper at the meeting of the Johns Hopkins Philological Association on "Unpublished Greek Epigrams." In the *Classical Weekly* for January sixteenth he published a review of Phoutrides, *Kostes Palamas, Life Immovable*; in *Art and Archaeology* for December he published a review of Wallace Nutting's *Furniture of the Pilgrim Century* 1620–1720; in the January number he published an account of the general meeting of the Archaeological Institute of America, and a review of Mooney's *Travel among the Ancient Romans*; in the *Art Bulletin*, vol. iv, no. 1, pp. 5–18, a paper by A. D. Fraser, M.A., 1920, on "The Age of the Extant Columns of the Olympeum at Athens," which was presented before the Archaeological Seminary, has been published; Professor Robinson published an article on "Sappho" in *The Baltimore Sun* for January twenty-second.

Professor R. V. D. Magoffin was elected president of the Archaeological Institute of America at the annual meeting, held at the University of Michigan during the Christmas holidays. Professor Magoffin was on the joint program of the Institute and the American Philological Association which also held its annual meeting at Ann Arbor. He gave an illustrated talk on "Archaeological Sidelights upon a Year in Italy and Greece." On January fifth he gave an illustrated lecture on "Greek and Roman History and Life" before the Latin Club of the Western High School of Baltimore. On January seventh he gave a lecture at the Arundel Club on "Archaeological Impressions and Historical Commentary on a Year in Italy and Greece." On January twenty-fifth he gave an illustrated talk on "Pictorial Peregrinations in Greece and Italy" before the Masonic Body of the Scottish Rite.

Dr. R. C. Williams, associate in Romance Languages, has recently published the following papers: "The Purpose of Poetry, and Particularly of the Epic, as Discussed by Critical Writers of the Sixteenth Century in Italy" in the *Romanic Review*, January–March, 1921; "Methods of

Treatment of the Epic" in the *Romanic Review*, July-September, 1921; and "Metrical Form of the Epic, as Discussed by Sixteenth Century Critics" in *Modern Language Notes*, December, 1921.

Professor T. Frank has been appointed director of the American School of Classical Studies in Rome for next year, 1922–1923, by the American Archaeological Institute.

The engagement of Miss Rebekah Jane Whalen to Dr. L. H. Baker, instructor in Greek, has been announced.

Dr. Baker has compiled an index of Professor Gildersleeve's extrasyntactical divagations in *Brief Mention;* the index appeared in the October number of the *American Journal of Philology* under the title "Index Scoliodromicus." He has written a review of Wilamowitz's *Griechische Verskunst* for the *Classical Weekly*. For the Homewood Play-Shop he has written a play based on the *Clouds* of Aristophanes, called *The Thinking Shop*. On January fifth Dr. Baker read a paper before the Kottabos Club on "The History and Significance of the Kottabos." During the past year he has served as secretary to the Baltimore Society of the American Archaeological Institute, and as treasurer of the Phi Beta Kappa Society.

Mr. F. S. Brackett, instructor in Physics, and Mrs. Brackett announce the birth of a daughter, Marjorie Lucille, on February 12, 1922.

Dr. M. L. Raney, Librarian of the University, has just been elected to a ten-year term in the American Library Institute, an organization limited to a membership of one hundred.

At the recent hearing before the Senate Committee on Finance on the sections of the Fordney Bill which propose to make all foreign books dutiable, Dr. Raney represented in protest a large number of educational and scientific organizations. Among these were the American Council on Education, the American Library Association, the National Education Association, the American Association for the Advancement of Science, the American Chemical Society,

the American Economic Association, the American Historical Association, the American Philological Association, the American Physical Society, the American Political Science Association, and the Geological Society of America.

The Du Pont Fellowships in the department of Chemistry have been renewed for the year 1922–1923.

Professor H. C. Lancaster represented the University at the annual meeting of the New England Alumni Association.

Professor G. Chinard spoke in January in honor of the tercentenary of Molière before the Alliance Française of New York City, and in February before the Alliance Française of Washington on "Gustave Flaubert."

The following communications were made by members of the Oriental Seminary before the University Philological Association at its January and February meetings: January 19, Professor Haupt on "To go flooie and Ger. *flöten gehen;*" February 17, Professor Haupt, on "Mixed Meters," and Associate Professor Ember on "The Egyptian Names for North, South, East and West."

Dr. F. R. Blake's Grammar of Tagalog, the most important language of the Philippine Islands, is now in press, and will shortly appear as the first number of a series of special Oriental publications issued by the American Oriental Society.

Dr. W. G. Seiple, a former student and graduate of the Oriental Seminary of the University, who has passed fourteen years as a missionary at Sendai, Japan, is spending his sabbatical year in America, and is giving a course in Japanese during the second semester.

Dr. R. P. Dougherty has in press a book entitled *Archives from Erech, Time of Nebuchadnezzar and Nabonides.* It is volume I of a series that is to be known as Goucher College Cuneiform Inscriptions.

From the pen of Professor Haupt the following two articles have recently appeared: "Early References to Cancer," in the *Journal of the American Medical Association,*

vol. 77, p. 1440, and "Tobit's Blindness and Sara's Hysteria" in the *Proceedings of the American Philosophical Society*, vol. 60, no. 2, pp. 71–95.

Associate Professor Ember has been granted leave of absence for the rest of the term in order that he may be able to pursue in Germany his investigations on the relations of Egyptian and Semitic. He expects to sail for Germany together with his family on April 12. He will spend most of the time in Berlin and Göttingen. While in Germany he intends to publish the first part of his Egypto-Semitic Studies.

RECENT LECTURES AT THE UNIVERSITY

The following lectures have recently been given at the University: January 9, "Nationality and Politics" by Alfred E. Zimmern; January 12, "The Currencies, Deficits, and Armaments of Europe" by Francis W. Hirst; January 23, "The Closed Shop" by James O'Connell; January 27, "The Deliverance of Ireland" by Henry W. Nevinson; February 15, "The Origin of Early Christian Church Art" by Josef Strzygowski.

AMERICAN UNIVERSITY UNION IN EUROPE

The American University Union, with which the Johns Hopkins University is connected as a subscribing institution, cordially invites students and graduates of the University, visiting Europe, to make use of the facilities offered at the Union offices at 50 Russell Square, London, W. C., and 1 rue de Fleurus, Paris. Lists of lodgings and pensions are kept and various social opportunities are offered. Access may also be obtained to universities and other institutions of learning, and candidates for degrees will find their way made easier by consulting, at Paris, Professor Paul Van Dyke, Director of the Continental Division, and at London, Dr. George E. MacLean, Director of the British Division.

The annual bulletin of the Union has just been issued and may be obtained on application to the Secretary,

Professor J. W. Cunliffe, Journalism Building, Columbia University, New York City. The reports show that there were 1153 registrations during the year at the London office, and over 500 at the Paris headquarters.

MEETING OF THE MODERN LANGUAGE ASSOCIATION

The Modern Language Association of America held one of the most successful and most largely attended meetings in its history at the University December 28–30. Professor Bright welcomed the visitors on behalf of the University. President Goodnow was compelled to be absent owing to illness. In many respects the meeting was like a reunion of Hopkins alumni. Among those who registered were E. C. Armstrong, Ph.D., 1897, E. J. Becker, '94, Ph.D., 1898, D. S. Blondheim, '06, Ph.D., 1910, J. M. Booker, '01, J. W. Bright, Ph.D., 1882, J. D. Bruce, Ph.D., 1894, M. P. Brush, Ph.D., 1898, P. Butler, Ph.D., 1899, V. Dulac, Ph.D., 1920, D. B. Easter, Ph.D., 1905, A. B. Faust, '89, Ph.D., 1892, T. H. Fowler, Ph.D., 1905, K. J. Grimm, Ph.D., 1899, G. Gruenbaum, Ph.D., 1912, S. N. Hagen, Ph.D., 1900, Edith M. Harn, Ph.D., 1919, W. S. Hastings, Ph.D., 1917, G. R. Havens, Ph.D., 1917, F. S. Hemry, Fellow, 1905–1906, Elizabeth F. Johnson, Ph.D., 1917, A. A. Kern, Ph. D., 1907, W. Kurrelmeyer, '96, Ph.D., 1899, H. C. Lancaster, Ph.D., 1907, F. A. Litz, Ph.D., 1921, C. C. Marden, '89, Ph.D., 1894, J. F. Mason, Ph.D., 1911, L. W. Miles, '94, Ph.D., 1902, R. D. Miller, '98, Ph.D., 1904, Meta H. Miller, M.A., 1919, T. A. E. Moseley, '07, Ph.D., 1915, L. H. Naylor, '17, W. A. Nitze, '94, Ph.D., 1899, L. M. Riddle, '08, M.A., 1911, R. B. Roulston, '00, Ph.D., 1906, A. Schaffer, '14, Ph.D., 1917, Jane V. Smead, M.A., 1918, C. A. Smith, Ph.D., 1893, A. L. T. Starck, '11, Ph.D., 1916, Claire M. M. Strube, Ph.D., 1919, Winifred Sturdevant, Ph.D., 1920, F. C. Tarr, '15, M.A., 1917, J. W. Tupper, Ph.D., 1895, O. Towles, Ph.D., 1912, J. K. Uhlig, '06, I. O. Wade, '16, F. M. Warren, Ph.D., 1887, R. C. Williams, '08, Ph.D., 1917, and G. E. Wisewell, M.A., 1911.

Papers were read by G. R. Havens, Ph.D., 1917, N. E. Griffin, '94, Ph.D., 1899, K. Campbell, Ph.D., 1898, E. C. Armstrong, Ph.D., 1897, and A. B. Faust, '89, Ph.D., 1892. J. F. Mason, Ph.D., 1911, presided over one of the group meetings.

At the dinner on the evening of December twenty-ninth, C. A. Smith, Ph.D., 1893, spoke on "The Verbal Audacities of O. Henry."

Professor W. Kurrelmeyer was elected second vice-president of the Association. E. C. Armstrong, Ph.D., 1897, was re-elected delegate to the American Council of Learned Societies.

THE MEDICAL SCHOOL

The Hospital is glad to announce that work has begun on the new buildings and other improvements so long looked forward to. The J. Henry Smith Company, contractors, have about half completed the razing of the old pathology building, the autopsy room, and Ward "M," and expects to have the new pathology building and woman's clinic ready by the fall (both to be eight stories high). The bids for both buildings, exclusive of equipment, total $900,000. An addition is also being made to the Harriet Lane Dispensary which greatly increases the facilities there. Funds have become available for conducting the department at full capacity, ninety beds instead of sixty as heretofore. Plans are being drawn for the extension of the laboratory in the same department.

On January 13 and 14, members of the American Gynecological Club, including physicians and surgeons from all parts of the United States and Canada, were guests of Doctors T. S. Cullen, H. A. Kelly, and J. W. Williams at the Hospital and Medical School. Among these was Dr. Pasteur-Radot of Paris, an authority on tropical diseases and the grandson of Dr. Louis Pasteur.

At the January meeting of the Baltimore City Medical Society, Dr. A. L. Bloomfield spoke on "Clinical Applica-

tions of Respiratory Bacteriology," and Dr. H. L. Amoss of the Rockefeller Institute, New York City, on "Epidemiology."

During January the following lectures were given before the Medical Societies of the Hospital: "The Origin of Blood Vessels" by Dr. Florence Sabin; "The Thermocardiogram" by Dr. Snyder; "Differential Centrigufalization in the Study of Filterable Viruses" by Dr. MacCallum and Miss Oppenheimer; "Clinical and Experimental Applications of Light in the Treatment of Tuberculosis" by Dr. E. Mayer of Saranac Lake, N. Y., and Dr. W. T. Bovie, of Harvard University; "Collateral Circulation Following Litigation of the Thoracic Duct" by Dr. Lee; "Non-protein Nitrogen in Blood of Toxaemic Patients" by Dr. Plass; "Chemical Production of Cardiac Arrythmias" by Dr. Carter and Dr. Andrus; "Influenzal Meningitis" by Dr. Rivers; "Cell Degeneration and Death in Tissue Cultures" by Dr. Lewis; "Experimental Rickets" by Dr. Shipley.

The Department of Medicine has been in some respects reorganized during the present year. This was necessary because of the resignations of Doctors Thayer, Palmer, and Dochez, and some of the younger members of the department. Dr. G. C. Robinson became acting professor of Medicine in July. Dr. A. M. Chesney was appointed associate professor, having come from Washington University, St. Louis. Dr. E. P. Carter was appointed associate professor, having formerly been lecturer in the department of Medicine. Dr. W. S. McCann was appointed associate, coming from Cornell Medical School, New York City. These three men are now at the head of the Bacteriological, Physiological, and Chemical divisions of the Medical Clinic. Dr. C. G. Guthrie, also associate professor, who remains at the head of the department of Clinical Pathology, has also become Chief of Clinic of the Dispensary, and has reorganized the teaching and clinical routine there. Dr. A. K. Krause, associate professor of Medicine, continues to conduct the Kenneth Dows Laboratory for the study of tuberculosis, thus making up the fifth division of the clinic.

Dr. C. S. Burwell has been appointed instructor in Medicine and is resident physician of the Hospital, having formerly held a similar position in the Massachusetts General Hospital of Boston. Dr. J. G. Huck is also a new appointment as instructor in Medicine. Doctors Dieuaide, Hodges, Kellers, Hannon, and Youmans are new assistants in Medicine. The fellowships this year are held by Dr. H. J. Stewart, Dr. E. A. Greenspon, Dr. A. C. Kolls, and Dr. D. N. Shulman.

There have been but few changes in the part-time staff in the department of Medicine, which is composed of men who spend part of their time in teaching and part in the practice of medicine. Dr. J. E. Moore has been promoted from an assistantship to be instructor in Clinical Medicine. Dr. H. M. Thomas, Jr., has been appointed instructor in Clinical Medicine, and is assistant chief of clinic in the Dispensary. Dr. F. L. Badagliacca and Dr. E. B. Freeman have been added to the teaching staff as assistants in Clinical Medicine.

Dr. G. J. Heuer has left the Department of Surgery to become professor of Surgery at the University of Cincinnati.

Dr. S. J. Crowe has been granted a two months leave of absence to study laryngology in Europe.

Dr. W. A. Fisher, Jr., has been awarded the Distinguished Service Medal for "exceptionally meritorious and distinguished services" during the war.

Dr. J. M. T. Finney has been appointed head of the Baltimore City executive committee of the Woodrow Wilson Foundation.

Dr. D. I. Macht has received from the American Pharmaceutical Association its 1921–1922 grant to aid in his researches on the benzyl compounds.

Dr. W. H. Smith, Superintendent of the Hospital, has been awarded the Distinguished Service Medal "for exceptionally meritorious and conspicuous service as a specialist in hospital management and construction."

Dr. A. K. Krause lectured before the Harvey Society of New York City on January twenty-first on "Experimental Study of Tuberculosis."

An anonymous donor has endowed the Department of Art as Applied to Medicine through a gift of $110,000.

THE SCHOOL OF HYGIENE AND PUBLIC HEALTH

Dr. C. E. Simon, of the Department of Medical Zoology, has been appointed a delegate to represent the School of Hygiene at the Second International Congress of Comparative Pathology which is to be held at Rome on September 20, 1922. Dr. Simon has also been designated to act as medical advisor to the School of Hygiene. Members of the School needing medical attention or advice may consult Dr. Simon at his office in the Laboratory of Medical Zoology between 4.00 and 5.00 p.m.

Major J. W. Meehan, of the United States Army Medical Corps, is now sanitary inspector, seventh corps training area headquarters, Fort Snelling, Minn.

Dr. F. G. Pedley is state epidemiologist for the State of Kansas.

Dr. G. H. Williams is doing public health work with the New York State Board of Health.

Dr. V. L. Ellicott is at the Willard-Parker Hospital for Contagious Diseases, New York City.

Dr. R. Abriol, after his graduation in February, expects to leave for the West Indies and the Panama Canal Zone to gain first hand information in tropical sanitation and quarantine methods. His tour of study will also include a visit to the Leper Colony in the Hawaiian Islands. Before taking up his course here, he had been studying the various state and city health organizations as well as the maritime quarantine procedures in this country. Dr. Abriol will return to resume his former position as quarantine officer with the United States Public Health Service in the Philippine Islands.

Dr. C. N. Leach is in Ceylon. On New Year's Day he wrote from the interior of the jungle, having started from Kandy with Dr. Hampton à la Ford for a tour of the island. They took guns, cameras, a camping outfit, and a native boy to sit on their belongings during their absence. They found an ancient rock temple, the refuge of one of the kings of Ceylon about 500 A.D. Then they went on to Polonnaruwa, a city founded about 200 B.C., the capital for six centuries, and a great Buddhist stronghold. The city was destroyed by the Tamils from South India about 900 A.D., and was completely lost in the jungle until rediscovered by the British about sixty years ago. They found great numbers of the most brilliantly colored birds, monkeys, deer, wild pigs, and a herd of wild buffalo. During the course of their hunt for game, they suddenly came upon an elephant about fifty yards ahead, so they quickly dropped flat to the ground, examining the nearby trees to find one sufficiently large and easy to climb. The elephant, however did not see them, so they were able to sneak away to safety. Dr. Leach will be later in Manila to take up work laid out for him by the Rockefeller Foundation.

Dr. W. H. Howell was the honor guest at a meeting and dinner of the Pittsburgh alumni on January seventeenth.

Dr. W. H. Welch has been appointed brigadier-general in the officers' reserve corps of the United States Army Medical Corps.

Professor E. V. McCollum has been awarded the Howard N. Potts gold medal of the Franklin Institute in recognition of his lecture before the Institute on "Nutrition and Physical Efficiency," delivered in 1920.

In *Science* for December 16, Dr. W. W. Cort published a brief report on the work of the expedition to Trinidad for the study of hookworm disease undertaken last summer under the joint auspices of the School of Hygiene and the International Health Board of the Rockefeller Foundation and with the coöperation of the Trinidad government.

The Society of Hygiene has held the following meetings: January 9, "Experiments in Epidemiology" by Dr. H. L. Amoss; February 13, "The Cost of the Reproductive Effort Measured from the Date of Conception, Based on Maryland Birth Registration, and Applying Pearson's Formula for Prenatal Time" by Dr. J. S. Fulton; "The Resistance of Different Hosts to Trypanosome Infections" by Dr. W. H. Taliaferro and L. G. Taliaferro; "Correlation between Two General Functions" by Dr. L. J. Reed.

The following lectures have been recently delivered on the De Lamar Foundation: January 16, "The Population Problem in its Relation to Public Health" by Dr. E. M. East, of Harvard University; January 23, "Nutritional Treatment of Tuberculosis in Childhood" by Dr. C. Pirquet, of the University of Vienna, Austria; January 30, "Interepidemic Influenza" by Dr. E. O. Jordan, of the University of Chicago; February 6, "The Physical Examination of large Groups of Individuals" by Dr. R. I. Lee, of Harvard University; February 13, "Climate, Health, and Civilization" by Dr. E. Huntington, of Yale University.

THE SCHOOL OF ENGINEERING

The School of Engineering is carrying on through its instructors and graduate students a great deal of interesting and useful research work. In the Civil Engineering Department J. T. Thompson, associate, and G. L. Bryan, Jr., instructor, have begun the investigation of the transfer of stress between bodies in bearing. In the Electrical Engineering Department Dean J. B. Whitehead and W. C. Ball, graduate student, are conducting important research on the deterioration of insulation due to internal ionization. Professor W. B. Kouwenhoven is investigating the heat treatment of different metals by means of a magnetic analysis. Dr. F. W. Lee, associate, is doing research work on the corona of gases. In the Mechanical Engineering Department Lieutenant-Commander Linsley, graduate student, is investigating the influence of the admixture of free fatty

acids on the critical points of lubricating oil films formed by straight mineral oils. W. L. Edel is working on the proper methods of ventilating chemical and other laboratories.

The Aldred Lectures, which for a number of years past have been given by prominent engineers during the spring months, have been discontinued. The Engineering Faculty considered these lectures of such importance that they decided to try to substitute lectures on engineering for them. The following lectures have been scheduled: March 8, "Construction of the Catskill Water Supply for the City of New York from an Engineering Standpoint," by J. W. Smith, chief engineer, Board of Water Supply, New York City; March 15, "Some Results of the War on Engineering Research" by C. E. Skinner, manager, research department, Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa.; March 22, "The Regulation of Atmospheric Moisture and its Industrial Applications" by W. H. Carrier, president, Carrier Engineering Corporation, Newark, N. J.; March 29, "Magnesium, Its Manufacture and Use" by W. G. Harvey, superintendent, American Magnesium Corporation, Niagara Falls, N. Y.

G. L. Bryan, Jr., instructor in Civil Engineering, received the degree of Master of Civil Engineering at the Commemoration Day exercises on February 22.

Dr. J. B. Whitehead, dean of the School of Engineering, read a paper on "Wave Form and Amplification of Corona Discharge" at the midwinter convention of the American Institute of Electrical Engineers in New York City, February 15–17.

Professor J. H. Gregory attended the annual convention of the American Society of Civil Engineers in New York City, January 18–20.

The School of Engineering has published in book form *A Review of Ten Years' Operation, 1912–1922.*

UNDERGRADUATE ACTIVITIES

By WILLIAM H. MOORE, JR., '23

Although the past mid-year exams, with their subsequent Blacklist, took the usual toll, the undergraduate body wasted little time in regaining its interest in campus life. Activities, both athletic and non-athletic, have been accorded most generous support. The Freshman class, having passed through its period of regulations, showed its "stuff" by continuing voluntarily its hearty support.

Activities have so expanded during the past year, that the barn has been found entirely inadequate in accommodating them. At present, the various boards are obliged to share their quarters with other activities, greatly inconveniencing each. Unless more adequate facilities are provided to meet the growing needs, the progress of undergraduate activities will be severely hampered. The students hope for a larger building to be erected after the much-discussed dormitories and stadium go up.

The Black and Blue athletes are preparing for one of the greatest spring sport schedules ever attempted. In order to carry the proposed program through a gigantic ticket campaign has been launched in an endeavor to sell three thousand tickets at five dollars apiece. The tickets not only have a per-game value of nine dollars, but also permit the holders to bring their guests free of charge. Besides the monetary assistance thus procured, it is hoped that the interest of outsiders may be turned to Hopkins and Hopkins activities.

The lacrosse team offers as excellent a program as can be arranged. On April the eighth the far-famed Oxford College (England) stickmen will open their American tour at Homewood. As the 1921 Black and Blue team is practically intact and as an excellent supply of material is being rounded into shape, there is every reason to believe that the visitors from the Old World will depart with a defeat chalked opposite

their names. Advance notices of the game have been published in papers all over the country. A victory will mean a great boost to Hopkins. Next in importance to the followers of the game will probably be the tilt with Lehigh, which will be remembered by members of the Alumni as a game of the most intense rivalry. Lehigh was the Southern champion last year. Army and Navy will again be met and these are also games attracting a great deal of attention.

The track team was probably harder hit than any other by the Blacklist. However, handicapped as it has been, the team has made a most creditable showing. The great indoor meet, held in the Fifth Regiment Armory, on the night of February 25, was the usual success. Many features were scheduled and representatives of all the leading universities of the East were entered. The team is hard at work, at present, preparing for a southern trip, on which the following teams will be met: Virginia Military Institute, University of Virginia, Washington and Lee.

The swimming team has had to run on an independent schedule this year. Lacking the usual Athletic Association support, the tankmen appealed to the student body for aid and received a generous response. Under the difficulties of independent management, the team has prospered and established an enviable record.

Finding his experiment with spring football practice a most profitable one last year, Coach Van Orman has decided to repeat the experiment. A call has been issued for green men and instruction in the elements of the game is to begin at once. Practice will continue until the weather becomes too warm, when a halt will be called.

Baseball practice has already started. At the organization meeting Captain Knecht found an unusual number of candidates responding to the call. With but two positions to be filled, the process of rounding out a championship nine has already been begun. This year, games will be played, wherever possible, on every other day, instead of two days a week as last year. Prospects are excellent and no one doubts but that the season will be a brilliant one.

What is believed to be one of the greatest steps forward in the progress of the University was made this year when a Publicity Board was established as an undergraduate activity. The Board has sent out, weekly, information, both athletic and non-athletic, concerning the undergraduate school. The Board is composed of three branches: state, out-of-state and intercollegiate, through which information is scattered throughout the country and before the eyes of millions of readers. Individual and form write-ups, and occasionally photographs, have been sent out as propaganda. An accurate file is kept of all material accepted.

The weekly assemblies have been exceptionally well-attended this semester. Several speakers of national prominence have spoken and have been well received. Added attractions in the form of Glee Club Quartettes and other musical offerings have served to heighten interest. Every meeting is opened with the singing of the University Ode.

The Musical Club has not only expanded in this field but has added a number of variety acts to its already attractive program. The Jazz Band has served on numerous occasions, increasing greatly the popularity of the debates and swimming meets.

With the coöperation of the Musical Club, the Cotillion Board this year gave a series of tea dances in the Civil Engineering Hall. The dances proved very popular and served, in a large measure, to draw the students into a closer relationship.

Under the progressive guidance of Major Garey, the R. O. T. C. unit has acquired a band and a rifle team. The team has won in most of its shoots and bids fair to establish a fine record.

Of interest to the members of the Alumni should be the presentation, by the Dramatic Club, of "If I were King" a past vehicle of E. H. Sothern as a star. The production will be given in a few days at the Lyric Theater and a good attendance is expected. Members of the Alumni may procure tickets by applying at Albaugh's Ticket office or by writing to Eli Frank at the University post-office.

THE JOHNS HOPKINS ALUMNI ASSOCIATION

A Directory of the Officers of the General Association and the Branches

The officers of the general Alumni Association are:

George W. Knapp, Jr., '99, president, 1901 Light St., Baltimore.

Horace E. Flack, Ph.D. 1906, treasurer, City Hall, Baltimore.

Robert B. Roulston, '00, Ph.D., 1906, secretary, Johns Hopkins University.

The officers of the Branch Associations are as follows:

New England—Dr. Harvey Cushing, president, Boston, Mass.; Stephen Rushmore, M.D., 1902, secretary-treasurer, 522 Commonwealth Ave., Boston, Mass.

Georgia Alumni Association—M. L. Boyd, M.D., 1907, president, Atlanta, Ga.; J. A. Addison, '03, secretary-treasurer, Y. M. C. A., Atlanta, Ga.

Virginia Alumni Association—D. S. Freeman, Ph.D., 1908, president, Richmond, Va.; R. E. Loving, Ph.D., 1905, secretary-treasurer, Richmond University, Richmond, Va.

Northern Ohio Alumni Association—C. W. Stone, M.D., 1905, president; J. S. Moore, '00, treasurer; W. G. Leutner, Ph.D., 1905, secretary, Adelbert College, Cleveland, Ohio.

New York and New Jersey Association—Col. Ned Arden Flood, '90, president, 67 Exchange Place, New York City; N. B. Foster, M.D., 1902, vice-president, 850 Park Ave., New York City; W. H. Brown, M.D., 1907, secretary, Rockefeller Hospital, New York City; Edwin S. Lewis, Ph.D., 1892, treasurer, 258 Broadway, New York City.

Northwestern Alumni Association—James Alton James, Ph.D., 1893, president, Northwestern University; William L. Ross, '99, secretary, 105 S. La Salle St., Chicago, Ill.

West Virginia Association—J. E. Hodgson, Ph.D., 1909, president, West Virginia University, Morgantown, W. Va.; Charles B. Cannaday, secretary, West Virginia University, Morgantown, W. Va.

Southern California Association—W. V. Brem, Jr., M.D., 1904, president; N. H. Williams, M. D., 1913, secretary, Los Angeles.

St. Louis Association—G. O. James, '95, Ph. D., 1899, president; B. Brooks, M.D., 1911, secretary and treasurer, Washington University Medical School, St. Louis, Mo.

Central California Association—J. M. Wolfsohn, M.D., 1911, president; S. H. Hurwitz, M.D., 1912, secretary and treasurer, University of California, San Francisco, Calif.

Minnesota Association—H. W. Cook, '98, M.D., 1902, president; E. H. Sirich, '06, Ph.D., 1914, vice-president; H. B. Dornblaser, M.D., 1914, secretary and treasurer, Minneapolis.

Washington, D. C., Association—W. T. Thom, Ph.D., 1899, president; W. L. DeVries, '88, Ph.D., 1892, vice-president; J. L. Bost, former student, secretary-treasurer.

MEETINGS OF THE EXECUTIVE COMMITTEE

Owing to the lack of a quorum the regular meeting of the executive committee of the Alumni Association could not be held as scheduled on Tuesday, January 3, 1922. Messrs. Griswold, Knapp, Mullen, and Roulston were the only members of the committee present. Mr. Niles had previously informed the secretary of his inability to be present, and the treasurer, Dr. Flack, was detained by his duties at the meeting of the State Legislature.

There was some informal discussion of the athletic situation, especially relations with the University of Maryland. It was suggested that the president write to the members of the committee to attend a special meeting on Tuesday, January tenth, and that he also invite the members of the Scholarship Committee to confer with the executive committee concerning the raising of the funds for the Alumni Scholarships. Mr. Edmund L. R. Smith, '17, was temporarily appointed chairman of the banquet committee, with power to select the other members of the committee.

The joint called meeting of the executive and scholarship committees was held on Tuesday, January 10, 1922, at 4.30 p.m., in Room 615, Fidelity Building. Of the executive committee Messrs. Griswold, Knapp, Mullen, Niles, Roulston, Schmeisser, and Wroth were present. After confirmation of the action of the informal meeting of January third in appointing E. L. R. Smith, '17, chairman of the banquet committee, the committee entered into joint session with the Scholarship committee; of this committee Messrs. Boyce, Giffen, and Gould were present. The minutes of the joint meeting were taken by the secretary of the scholarship committee and therefore do not belong in the records of the executive committee.

The last meeting of the year was also merely an informal one, and was held on Tuesday, February 7, 1922, at the

usual time and place. Messrs. Griswold, Knapp, Roulston, and Schmeisser were present. The annual banquet and the work of the scholarship committee were discussed at length. The committee then adjourned until the regular meeting in March, when the new executive committee will meet.

MEETING OF PITTSBURGH ALUMNI

The Johns Hopkins men of Pittsburgh held a dinner on Wednesday evening, January eighteenth, at the University Club. Dr. William H. Howell, assistant director of the School of Hygiene and Public Health of the University, was the guest of honor. The committee that organized the dinner included T. Fitzgerald, '98, W. E. Hart, M.D., 1909, and T. S. Baker, '91, Ph.D., 1895. Dr. Baker is at present the acting president of the Carnegie Institute of Technology in the absence of Dr. A. A. Hamerschlag who is in Europe. At the meeting it was decided to have the committee that organized this dinner continue as an executive committee for the coming year with the idea of having another dinner.

GEORGIA ALUMNI PREPARE FOR ANNUAL DINNER

The secretary of the Georgia Branch of the Alumni Association is actively engaged in arranging for the annual dinner of that Branch. A news-sheet has been published giving both local and University news. The annual dinner will be held on February eighteenth or twenty-fifth. Dr. J. W. Williams, dean of the Medical School, will be the speaker. We congratulate the Georgia Branch on its able and efficient secretary.

ALUMNI NOTES

H. P. Houghton, Ph.D., 1907, was ordained a priest of the Protestant Episcopal Church at Milwaukee, Wis., on December 11, 1921. He has been appointed assistant rector and director of religious education at St. Paul's Church, Milwaukee.

L. W. Meekins, '13, American Trade Commissioner of the Bureau of Foreign and Domestic Commerce, recently returned to the United States from China, where he has been stationed during the past two years. Mr. Meekins was transferred to Shanghai about a year ago and placed in charge of the office there.

The Catonsville Lutheran Church. A Sketch of its Origin has been published by G. C. Keidel, '89, Ph.D., 1895.

B. C. Steiner, Ph.D., 1891, will soon publish a *Life of Chief Justice Roger B. Taney*. The book will be issued by the Williams and Wilkins Company of Baltimore.

E. T. Norris, '21, one of the original members of the Johns Hopkins Dramatic Club, has taken up the stage as a profession and recently appeared in Baltimore with Otis Skinner in "Blood and Sand."

B. H. Conn, '17, and L. C. Merryman, '18, recently passed the State bar examinations which were held on November 28–29, 1921.

R. Rosen, '16, M.A., 1920, holds a research fellowship in Chemistry at Clark University, Worcester, Mass.

The engagement of Miss Dorothy Sippel, of Baltimore, to W. H. Maltbie, Ph.D., 1895, has been announced.

The engagement of Miss Virginia Ellinor Stewart, of Baltimore, to N. C. Keyes, '21, has been announced.

I. O. Wade, '16, professor of Romance Languages at Marietta College, Ohio, has been granted leave of absence and is pursuing graduate studies at Princeton University.

F. C. Tarr, '15, M.A., 1917, is instructor in Spanish at Princeton University.

J. M. Brendal, former student, is superintendent of the public schools at Hallock, Minn.

S. B. Myers, '98, is vice-president and production manager of the American Cement Tile Manufacturing Company of Pittsburgh, Pa.

F. G. Allinson, Ph.D., 1880, has been elected president of the American Philological Association.

A. C. Lawson, Ph.D., 1888, professor of Geology at the University of California, is said to have discovered a method for predicting earthquakes with the same precision as making weather forecasts.

F. Diehl, former student, is at Piedmont College, Demarest, Ga.

R. E. Hoke, Ph.D., 1922, is a member of the staff at Birmingham Southern College, Birmingham, Ala.

W. F. Gericke, Ph.D., 1922, has become a member of the faculty of the University of California, Berkeley, Calif.

Grace B. Branham, Ph.D., 1917, is a member of St. Benedict's Convent, Colwich, Staffordshire, England.

J. S. Watson, B.S. in Engineering, 1917, is gas investigator for the Shell Company at Oilfields, Fresno County, Calif.

Dr. H. P. Cushing, formerly of the Medical School, has been elected president of the American College of Surgeons.

Economics for the Accountant by K. Simpson, '14, Ph.D., 1917, has been published by D. Appleton and Company of New York City.

A. L. Bloomfield, '07, M.D., 1911, addressed the Baltimore City Medical Society on January 6. His subject was: "Clinical Applications of Respiratory Bacteriology." Dr. T. B. Futcher is president of the Society.

J. D. Reichard, M.D., 1914, of the United States Army Medical Corps, has been transferred from Fort McHenry Hospital, Baltimore, to Fox Hills, Staten Island, N. Y.

Dr. J. Friedenwald, '87, has joined the staff of the University of Maryland Medical School.

W. M. Driver, Jr., '20, who is studying law at Harvard University, spent the Christmas holidays at his home in Baltimore.

S. S. Janney, '95, and Rabbi W. Rosenau, Ph.D., 1900, have been appointed by Governor Ritchie members of the commission to study the plan of making the University of Maryland a modern, efficient institution. Mr. Janney is chairman of the commission.

J. A. Haughton, '03, is now living in New York City.

J. L. G. Lee, '93, is speaker of the Maryland House of Delegates. J. H. Rice, '14, is chairman of the House Committee on Constitutional Amendments. D. G. McIntosh, Jr., '98, is a member of the State Senate and a leader of the Democratic Party in that body.

C. A. Smith, Ph.D., 1893, addressed the students of the Western High School of Baltimore on December tenth. His subject was: "O. Henry."

A. M. Warren, '15, of the United States Consular Service, has been transferred from Cape Haitien, Haiti, to Karachi, India.

Rev. C. R. Hemphill, Fellow, 1878-1879, is professor of New Testament Exegesis and dean of the faculty at the Louisville Presbyterian Theological Seminary, Louisville, Ky.

J. L. Tull, '19, is connected with the firm of Dulany, Tull and Spitler, Inc., Purveyors to

Steamships, Railroads and Hotels, of New York City.

Rev. F. A. Clarke, '93, formerly of Landor, Wyoming, is now located at Kilgore, Nebraska.

J. F. Birkmeyer, B.S. in Chemistry, 1921, is a student at Harvard University.

R. A. Cox, former student, is a student in the medical department of the University of Virginia.

J. L. McGhee, Ph.D., 1911, is a member of the faculty of Emory University, Georgia.

T. Iyenaga, Ph.D., 1890, addressed the University Club of Baltimore on January twenty-seventh.

A. F. Gorton, '12, Ph.D., 1915, has left Toledo, Ohio, to join the research department of the National Malleable Casting Company, of Cleveland, Ohio.

E. C. Donohoe, '21, is a student in the medical department of the University of Maryland.

R. H. Haseltine, '21, and M. Glassman, '21, are doing graduate work at the University.

Mary T. Roudebush, M.D., 1920, is a member of the staff at Peabody College, Nashville, Tenn.

F. D. Worthington, M.D., 1917, is practicing medicine at Belair, Md.

L. D. Bristol, M.D., 1907, is now located in Lansdowne, Pa.

T. Y. Shih, '21, is now located in New York City.

R. H. Wright, former student, is president of the East Carolina Teachers' College, Greenville, N. C.

J. C. Jones, former student, has been chosen president of the University of Missouri, Columbia, Mo.

M. G. Paulus, '12, Ph.D., 1915, has left Whiting, Indiana, and is now located at Casper, Wyoming.

W. I. Hull, '89, Ph.D., 1892, lectured at the Casino, Mount Washington, Baltimore, on January eighteenth, on the Disarmament Conference. Dr. Hull was a special observer during the Conference in Washington.

I. L. Straus, '90, addressed the Baltimore Federation of Labor on January eighteenth.

A. K. Chalmers, '18, was ordained a minister of the Congregational Church at New Haven, Conn., on February 17.

The Origin of Paul's Religion by J. G. Machen, '01, of Princeton Theological Seminary, has been published by the Macmillan Company of New York City. The book is the James Sprunt lectures delivered at the Union Theological Seminary of Virginia.

R. F. Bowers, '21, F. R. Calkins, Jr., '21, B. S. Cannon, '21, L. M. Cattanach, '21, J. S. Eastland, '21, E. L. Foote, '21, S. Glick, '20, N. J. Howard, '21, C. Hyman, '21, J. T. Johnson, Jr., '21, A. J. Levy, '21, S. H. Lin, '21, L. W. Lord, '21, S. F. Marshall, '21, T. Morici, '21, H. D. Niles, '21, V. H. Norwood,

'21, E. M. Pickford, '21, L. C. Pusch, '21, W. T. Ritter, '21, P. E. Rothman, '21, M. Sherry, '21, F. R. Smith, Jr., '21, and H. Strauss, '21, are first-year students at the Johns Hopkins Medical School.

G. E. Wisewell, M.A., 1911, is now teaching French at Hamilton College.

Winifred Sturdevant, Ph.D., 1920, after a year's study in France, has returned to her position at the Roland Park Country School.

Jane V. Smead, M.A., 1918, is teaching at Wells College, Aurora, N. Y.

J. B. Edwards, Ph.D., 1914, associate professor of Greek at the University of the South, has accepted the professorship of Classics at Wells College, Aurora, N. Y.

The engagement of Miss Virginia Knower, of Cincinnati, Ohio, to J. E. Elmendorf, M.D., 1918, has been announced.

C. McL. Andrews, Ph.D., 1889, is joint editor of *The Journal of a Lady of Quality*, which has just been published by the Yale University Press.

H. Brotman, '21, is studying medicine at Jefferson Medical College, Philadelphia, Pa.

J. M. Motley, Ph.D., 1906, has been elected president of the Family Welfare Association of Baltimore.

K. Simpson, '14, Ph.D., 1917, has been appointed acting assistant professor of Economics at Princeton University.

H. D. Austin, Ph.D., 1911, has been appointed professor of Italian and head of the department at the University of Southern California, Los Angeles.

J. R. Lomauro, '20, is now in his second year as a medical student at Cornell University Medical School in New York City. Mr. Lomauro spent last summer in newspaper work at his home in Passaic, N. J.

J. F. Krug, Ph.D., 1921, is assistant professor of Chemistry at Williams College, Williamstown, Mass.

L. H. Opdycke, Ph.D., 1922, is professor of Physical Chemistry at the College of the City of New York.

J. S. Dickinson, '13, is with the firm of McAdoo, Cotton and Franklin of New York City.

G. R. Havens, Ph.D., 1917, has been promoted to a professorship of French at Ohio State University.

MARRIAGES

T. R. Chambers, '06, M.D., 1910, and Miss Margaret H. Sisson, of Baltimore, Md., on January 25, 1922.

R. K. Cole, '15, and Miss Etta Mae Morris, of Baltimore, Md., on December 27, 1921.

J. M. T. Finney, Jr., M.D., 1919, and Miss Virginia Lee Milton, of Wilmington, N. C., on February 4, 1922.

R. B. Holmes, former student, and Miss Lelia B. Tall, of Baltimore, Md., on January 14, 1922.

R. M. Merrill, former student, and Miss L. B. Sadler, of Greensboro, N. C., on February 10, 1922.

A. L. T. Starck, '11, Ph.D., 1916, and Miss Gretchen Todd, of Milburn, N. J., on September 16, 1921.

L. R. Wharton, M.D., 1915, and Miss Louise Wallace Hazelhurst, of Baltimore, Md., on January 10, 1922.

DEATHS

H. B. Cross, Ph.D., 1921, on December 27, 1921.

A. K. Detwiler, '91, on January 30, 1922.

P. O. Keilholtz, former student, on January 21, 1922.

NECROLOGY

CHARLES J. MEYER

Mr. Charles J. Meyer, for many years Treasurer of the University, died on the fourth of February, 1922. Mr. Meyer entered upon his duties in 1877, and served the University faithfully and well until failing health forced him to retire from active duty on May 1, 1911. Mr. Meyer was a native of Ohio, but had spent the major part of his long life of eighty-two years in Baltimore. He was for a long period actively identified with philanthropic movements, especially with the work of the Free Summer Excursion and the Boys' Home.

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